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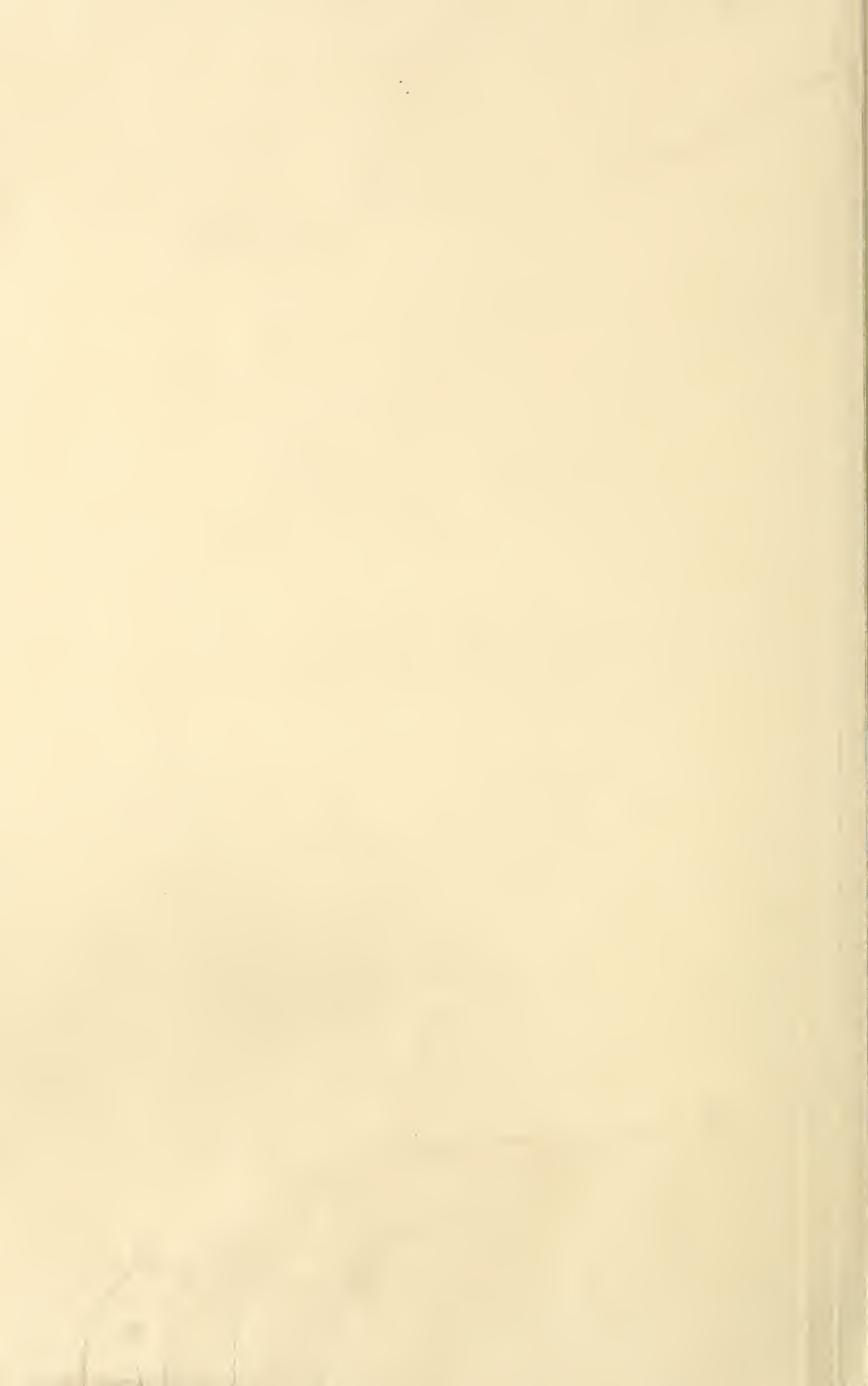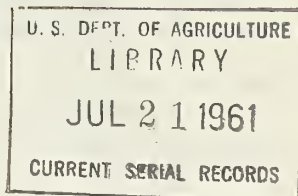
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# Random Sample
# EGG PRODUCTION TESTS
# 1959 - 60 Combined Summary

HOW DID THEY PERFORM ?

Egg production; Mortality;

Feed conversion; Body weight;

Egg weight; Income over feed

and chick costs; Interior quality;

Shell thickness

## AGRICULTURAL RESEARCH SERVICE · U.S. DEPARTMENT OF AGRICULTURE

# FOREWORD

This is a combined summary of the Random Sample Egg Production Tests conducted in the United States during 1959-60. This summary, within the limits of acceptable statistical procedures, provides a basis for a sound comparison of the performance of a stock with any other stock tested. All stocks are listed, in alphabetical sequence, with the performance data (Regressed Means) and the LSD Range for each trait at the 0.05 level of probability. It is essential when comparing the performance of two stocks to determine whether the Regressed Mean of one stock falls within the LSD Range of the other stock. If it does, the odds are 19 to 1 that the two stocks are approximately equal in that trait. If it does not, by the same odds, the difference can be considered as real. To avoid misinterpretation of the data the explanatory material on pages 3 through 6 should be carefully reviewed.

# CONTENTS

# INTRODUCTION

Random Sample Egg Production Tests are designed to provide a reliable guide for poultrymen, hatcherymen and breeders concerning the performance of stocks offered for sale by breeders and hatcheries. Entries consist of a random sample of hatching eggs or chicks of the stock to be tested. The samples are drawn by prescribed methods to insure that the entry is typical of the stock it represents. All entries within a test are treated the same with respect to housing, feeding, management, and disease control with the objective of avoiding differences in performance, due to environment.

All tests follow these basic principles in their operation. However, there are differences between tests including climatic conditions and other environmental factors which effect the results. For this reason direct comparisons of the results of two stocks in different tests may be misleading.

The primary purpose of this summary is the presentation of test results in a manner that will support sound evaluation of all stocks tested. To accomplish this, the results of all tests are combined, by stocks, with adjustments for test differences and the use of other accepted statistical procedures. The results of these computations are published as the regressed mean of each stock for each trait. The regressed means provide a sound basis for comparisons between stocks.

## HOW TO TELL WHETHER DIFFERENCES ARE REAL

Errors of two kinds influence the results of even the most carefully designed and operated tests. The first kind of error is the chance deviation or unavoidable "sampling error" made when a small sample of eggs or chicks represents an entry. The other kind of error is due to uncontrolled or unknown environmental differences between entries that happen in spite of all efforts to treat each entry exactly alike. The differences between the results reported for two entries in a single test may be due to these chance variations rather than to a real difference in the performance capabilities of the two stocks. The effect of such errors can be materially reduced by basing the comparisons on the combined results of several tests. If all entries compared were entered in the same tests, the simple averages could be utilized without adjustment.

The performance data (regressed means) reported in this summary are derived from the results reported by the individual tests. It is unlikely, however, that these means for any stock, even though entered in only one test, will coincide precisely with the performance data published by the test. The variations are due to adjustments for test differences, the number of tests entered, and the number of replicates per test. These statistical adjustments allow predictions to be made of what the average performance would have been for each stock if all stocks had been entered in all tests.

The statistical treatment applied to the test data is designed to reduce the influence of nongenetic variations but this cannot be accomplished perfectly. Consequently, estimates or predictions of performance cannot be made with absolute precision. Reliable predictions, within prescribed limitations, can be made as to whether a difference in the reported performance of two stocks represents a real difference in their performance. These predictions involve the use of the least significant difference (LSD)[1] figures which have been computed for each trait or performance factor reported.

As the name implies, the least significant difference figures prescribe the approximate limits of differences that may be due to chance. Differences that equal or exceed the LSD probably are due to inherent differences in the stocks. The LSD is a reliable guide for the appraisal of differences but it is not infallible. Appraisals of differences, based on comparison with the LSD may be wrong and the probability of such errors are considered in computing the LSD.

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[1] The least significant differences (LSD) referred to in this report were computed from the approximate standard error of the regressed mean and the significant studentized range values for 20 means as given in Duncan's tables.

The LSD's for the data in this summary were computed at three levels of significance (10%, 5%, and 1%). These may be expressed as odds of 9:1, 19:1, and 99:1, respectively, against differences as large as the LSD being due to chance alone. The conclusion as to whether a difference is real may depend on the tolerance for error that is acceptable. For example, two stocks being compared for mortality during the laying period are reported to have regressed means of 7.5% and 11.2%, or a difference of 3.7%. The difference required for significance (LSD) for this trait at odds of 9:1 is 3.4%. Since the difference reported exceeds the LSD, a real difference between the stocks is indicated. If less tolerance for error is desired, the LSD at odds of 19:1 (4.0%) or 99:1 (5.1%) may be used. At these odds the LSD exceeds the reported difference indicating no real difference between the stocks. In the final analysis the person using the report must decide what odds he is willing to accept that the differences are real and not due to chance alone.

## HOW TO USE THE RESULTS

All differences among the set of regressed means for the same trait are measured with essentially the same amount of reliability. Hence, the approximate amount of difference required for significance among any two of these means can be computed. The approximate differences required for significance at three levels of significance (0.10 level or 9:1 odds, 0.05 level or 19:1 odds, and 0.01 level or 99:1 odds) are tabulated below:

Approximate Differences Required For Significance (LSD) Among Regressed Means
(1959-60 Test Data)

| Odds | Mortality | | Age at 50% Production | Egg Production | | Income | Feed Conversion | Average Egg Wt. |
| | Growing | Laying | | Hen Housed | Hen Day | | | |
| | (%) | (%) | (days) | (no.) | (%) | ($) | (lbs.) | (oz.) |
| 9:1 | 0.4 | 3.4 | 6 | 14.1 | 3.2 | 0.27 | 0.25 | 0.5 |
| 19:1 | .5 | 4.0 | 7 | 16.8 | 3.8 | .32 | .30 | .6 |
| 99:1 | .6 | 5.1 | 9 | 21.6 | 4.9 | .42 | .38 | .8 |

| Odds | Body Weight | Albumen Quality | Blood Spots | | Meat Spots | | Shell Thickness |
| | | | 1/8 Inch or More | Less than 1/8 Inch | 1/8 Inch or More | Less than 1/8 Inch | |
| | (lbs.) | (Haugh Units) | (%) | (%) | (%) | (%) | (1/1000 Inch) |
| 9:1 | 0.3 | 2.6 | 1.1 | 1.2 | 3.6 | 3.8 | 0.003 |
| 19:1 | .4 | 3.1 | 1.3 | 1.4 | 4.3 | 4.5 | .004 |
| 99:1 | .5 | 4.0 | 1.7 | 1.8 | 5.5 | 5.8 | .005 |

When reference is made to the significance of differences among the performance of different stocks, the level of significance used should be given.

As an aid to the evaluation of significant differences among stocks, the approximate LSD range at the 0.05 level of probability (19:1 odds) is given for each regressed mean in the alphabetic listing of all stocks. The LSD range represents the regressed mean of a stock, plus and minus the LSD (less one unit of measurement) at the 0.05 level. As an example, for the "Age at 50% Production" trait, the LSD is 7 days. Thus stock 1, with a regressed mean of 175 days has an LSD range of 169 (175 minus 6) to 181 (175 plus 6). Stock 4, with a regressed mean of 165 days, does not fall within the LSD range of stock 1 (169-181) and consequently is considered to be significantly different from stock 1. Likewise, stocks 2, 3, and 5, with regressed means of 177, 174, and 169, respectively, are not significantly different from stock 1 since each regressed mean falls within the LSD range of stock 1.

## EXPLANATION OF INCOME FIGURES

The "Income Over Feed and Chick Cost" figures reported in this summary represent the sales value of the eggs produced and of the hens at the end of the test minus the cost of the chicks and the feed used during the growing and laying periods. These figures may be useful in comparing the overall performance of stocks, but they should not be considered as predictions of "profit" to be obtained under commercial

operations. The "income" figures should be reduced by other costs, such as labor, building and equipment depreciation, vaccination, litter, interest, taxes and insurance, to approximate profits that might be expected under commercial conditions. Surveys conducted among commercial producers indicate that such costs may range from $1.00 to $2.00 per pullet housed.

## EXPLANATION OF TERMS AND ABBREVIATIONS

Stock:      A term used to identify a specific breeding combination of chickens. These breeding combinations may include pure strains, strain crosses, breed crosses, or combinations thereof.

Overall Mean:      The average of the test adjusted means for all stocks. This estimates what the overall average would have been if all stocks had been entered in all tests.

Range:      The range represents the difference between the maximum and minimum performance among the 165 stocks, based on the regressed means.

Repeatability:      This figure can vary from 0.00 to 1.00. The higher the figure the greater is the likelihood of stocks ranking in the same order from one test to another.

Correlation Among Replicates:      This correlation measures the repeatability among replicates of the same stock in the same test. It may vary from 0.00 to 1.00 but can not be lower than the repeatability of stock performance between tests. The higher the correlation among replicates the less need there is for replication of stocks within tests.

Test Adjustment Factor:      The amount by which a given test was above or below the average of the seven tests which reported data for all 15 traits. These factors were determined on an intra-stock basis with a least-squares analysis.

Regressed Mean:      The test adjusted stock mean after weighting it according to the number of tests in which the stock was entered, the number of replicates per test, the repeatability, and the correlation among replicates in the same test.

Least Significant Difference:      The LSD figure prescribes the approximate limits of difference that may be due to chance. This has been computed at three levels of significance (10%, 5%, and 1%) and may be expressed as odds of 9:1, 19:1, and 99:1, respectively, against differences as large as the LSD being due to chance alone.

LSD Range:      These figures represent the regressed mean of a stock, plus and minus the LSD (less one unit of measurement).

Kind of Stock:

| | | | | |
|---|---|---|---|---|
| WL | White Leghorn | PS | Pure Strain |
| BPR | Barred Plymouth Rock | LX | Line Cross |
| WPR | White Plymouth Rock | SX | Strain Cross |
| RIR | Rhode Island Red | BX | Breed Cross |
| RIW | Rhode Island White | INX | Inbred Cross |
| NH | New Hampshire | IN | Incross |
| CG | California Gray | Syn. | Synthetic |
| AW | Austra White | | |
| WA | White Austra | | |

## ANALYTICAL PROCEDURES

This summary includes performance data on 165 stocks entered in the 15 Random Sample Egg Production Tests for 1959-60. However, only 7 of the 15 tests reported data for all of the 15 traits considered in this summary. Tests that were not included in the computation of the regressed means for each of the 15 traits are shown under the heading "Tests Not Included" in the tabulation on pages 8 and 9. Although the Intermountain test reported performance data on "Number of Eggs per Pullet Housed" and on "Percent Laying House Mortality," these data were excluded in the analysis because this test did not report data on "Percent Hen Day Production." Otherwise, all data reported from all tests were included in the combined analysis.

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The performance data were reported by replicate pens by most tests with replicates. The replicate data were analysed by least-squares procedures to obtain the test adjustment factors (page 7), the repeatability estimates for each trait and the correlation among replicates within tests (pages 8 and 9). The replicate data from the Texas test were averaged for this analysis because of the small number of birds per replicate.

Each stock entered in the Iowa test was tested in replicate pens at each of four locations. The number of birds per pen varied from 48 to 194. Only the combined data (adjusted for location effects) for a given stock over all four locations and all eight replicates were reported for inclusion in the combined analysis. However, since this information resulted from tests at four locations and from eight replicate pens it was treated as such in computing the regressed means.

Each stock entered in the California test was tested in replicate pens or groups at each of two separate locations, i. e. , floor and cage. Each stock entered in the New Hampshire test was tested in a single replicate at each of three locations. These data were reported separately by replicate at each location. Hence, the California test data were treated as two locations and four replicates and the New Hampshire test data were treated as three locations and three replicates in computing the regressed means.

In order to place the results for all traits on a comparable environmental basis, the adjustment factors used to adjust for test differences (page 7) were expressed as a plus or minus deviation from the average for the seven tests which reported complete performance information. These factors were then used to obtain the test adjusted stock averages (the least-squares stock means). The adjusted stock averages were then regressed toward the overall mean ($\hat{\mu}$) to account for variations in number of tests entered and number of replicates per test.

The formula used to compute the regressed means is:

$$\text{Regressed Mean} = \hat{\mu} + \frac{nkr}{1+(k-1)x+(n-1)kr} = (\hat{s}_i)$$

where:    $\hat{\mu}$ = the average of the test adjusted stock means

   $n$ = the number of tests entered. [2]

   $k$ = the average number of replicates per test.

   $r$ = repeatability.

   $x$ = the correlation among replicates.

   $\hat{s}_i$ = the test adjusted stock average minus the overall mean ($\hat{\mu}$)

[2] Only the combined data for a given stock over all four locations and all eight replicates were reported from the Iowa test. However, this information was treated as four test locations and eight replicates in computing the regressed means. The three locations for the New Hampshire test were also considered as three test locations.

The Adjustment Factors Used to Adjust for Test Differences

| Test | % Mortality Growing Period | % Mortality Laying Period | Days of Age at 50% Production | Egg Production Hen-Housed-No. | Egg Production Hen Day % | Income Over Feed and Chick Cost-$ | Feed Per 24 Oz. of Eggs-Lbs. | Egg Weight-Oz. | Body Weight-Lbs. | Albumen Quality Haugh Units | % Blood Spots 1/8 inch or More | % Blood Spots Less than 1/8 inch | % Meat Spots 1/8 inch or More | % Meat Spots Less than 1/8 inch | Shell Thickness 1/1000 Inch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Arizona | + 1.37 | - 6.50 | - 6.07 | +24.52 | +3.29 | +1.36 | +0.24 | -0.02 | -0.06 | +4.78 | +0.18 | -1.28 | -0.03 | -0.29 | -0.044 |
| California Floor | + 3.39 | + 5.81 | + 4.19 | -12.27 | -1.02 | -1.28 | - .02 | + .08 | + .21 | +4.80 | - .29 | - .68 | .00 | +1.62 | - .065 |
| California Cage | ***** | + 4.89 | + 7.68 | + 2.03 | +4.34 | **** | **** | + .16 | - .11 | +4.08 | -1.57 | -2.65 | - .61 | +1.11 | - .067 |
| Florida | + .17 | - 1.20 | + 6.79 | - 2.79 | -1.21 | - .17 | + .30 | + .49 | + .20 | +1.41 | + .97 | +1.21 | -1.22 | -2.62 | - .003 |
| Intermountain | ****** | ****** | - 9.12 | ******* | ****** | - .20 | ****** | + .05 | + .41 | ****** | ****** | ****** | ****** | ****** | ****** |
| Iowa | - 4.06 | - 3.05 | -13.89 | +43.76 | +8.67 | ****** | ****** | + .15 | - .02 | - 3.81 | ****** | ****** | ****** | ****** | + .127 |
| Minnesota | -13.81 | + 4.48 | -12.41 | + 3.90 | + .74 | + .68 | - .08 | -2.62 | + .05 | +5.42 | ****** | ****** | ****** | ****** | - .124 |
| Missouri | - .78 | + 4.34 | - 8.02 | - 3.36 | +1.02 | + .39 | - .63 | + .37 | + .17 | -5.92 | + .71 | + .08 | +1.23 | +1.48 | + .195 |
| New Hampshire #1 | + .10 | - 1.65 | -22.67 | +14.23 | - .58 | + .13 | - .28 | - .54 | - .30 | ****** | ****** | ****** | ****** | ****** | ****** |
| New Hampshire #2 | - 6.11 | -12.73 | ******* | +35.80 | +3.58 | + .69 | - .34 | ****** | ****** | ****** | ****** | ****** | ****** | ****** | ****** |
| New Hampshire #3 | - .10 | + 5.53 | ******* | +33.25 | +8.01 | +1.37 | -1.51 | ****** | ****** | ****** | ****** | ****** | ****** | ****** | ****** |
| New Jersey | ****** | - 1.54 | -14.87 | +18.27 | +1.61 | - .04 | - .13 | + .30 | - .01 | +1.54 | + .07 | +1.22 | ****** | ****** | - .092 |
| Central New York | + .09 | + .93 | - 5.93 | + 4.75 | + .64 | - .45 | - .07 | - .83 | - .36 | - .01 | + .49 | - .01 | ****** | ****** | + .056 |
| Western New York | + .20 | - 1.77 | - 9.63 | + 3.94 | - .47 | - .22 | - .30 | - .87 | - .37 | +2.20 | + .14 | + .05 | ****** | ****** | + .078 |
| North Carolina | + 1.27 | - .52 | + .01 | + 3.55 | - .11 | + .72 | + .12 | - .74 | - .35 | +2.44 | -1.29 | + .02 | - .85 | -1.06 | - .158 |
| Pennsylvania | - 5.79 | + 1.17 | + 2.58 | - 6.78 | +1.19 | - .31 | + .17 | - .08 | .00 | +2.46 | + .16 | + .09 | +2.26 | +2.42 | - .084 |
| Texas | + 1.63 | - 3.19 | - 6.73 | +34.08 | +7.85 | +1.00 | - .19 | - .79 | + .27 | ****** | + .44 | + .56 | -1.40 | -1.57 | ****** |
| Wisconsin | + .36 | - 3.09 | + .52 | - 2.88 | -3.16 | - .71 | - .18 | - .10 | - .17 | -9.97 | - .02 | + .06 | -1.96 | -6.47 | + .160 |

Starting Date, Ending Date, Pullets per Entry and Length of 1959-60 Tests

| Test | Starting Date | Ending Date | Pullets per Entry | Length of Test |
|------|---------------|-------------|-------------------|----------------|
| Arizona | May 13, 1959 | September 23, 1960 | 100 | 500 days |
| California (1st lot) | March 3, 1959 | September 5, 1960 | 108 | 553 days |
| "          (2nd lot) | March 24, 1959 | September 26, 1960 | | 553 days |
| Florida | March 28, 1959 | August 8, 1960 | 50 | 500 days |
| Iowa (1st lot) | February 20, 1959 | June 21, 1960 | ( | ( |
| "    (2nd lot) | March 6, 1959 | July 5, 1960 | ( 960 | ( 486 days |
| "    (3rd lot) | March 20, 1959 | July 19, 1960 | ((Approx.) | ( (Approx.) |
| "    (4th lot) | April 4, 1959 | August 2, 1960 | ( | ( |
| Minnesota | April 3, 1959 | August 16, 1960 | 100 | 500 days |
| Missouri | March 20, 1959 | August 1, 1960 | 50 | 500 days |
| New Hampshire | April 23, 1959 | August 31, 1960 | 490 | 496 days |
| New Jersey | March 31, 1959 | August 11, 1960 | 50 | 500 days |
| Central New York | February 27, 1959 | July 11, 1960 | 50 | 500 days |
| Western New York | March 27, 1959 | August 8, 1960 | 50 | 500 days |
| North Carolina | February 13, 1959 | June 26, 1960 | 100 | 500 days |
| Pennsylvania | May 1, 1959 | September 15, 1960 | 50 | 500 days |
| *Tennessee | September 3, 1958 | March 16, 1960 | 60 | 560 days |
| Texas | February 24, 1959 | July 7, 1960 | 48 | 500 days |
| Utah | April 6, 1959 | August 17, 1960 | 70 | 500 days |
| Wisconsin | March 9, 1959 | July 20, 1960 | 50 | 500 days |

NOTE: Records for the California Test were terminated when the birds reached 500 days of age for the purpose of the Combined Summary (1959-60).

*Data from the Third Tennessee Test were included in the 1958-59 Combined Summary. The Fourth Tennessee Test data will be included in the 1960-61 Combined Summary.

Analytical Data For The Traits Measured

| Trait | Tests Not Included | Overall Means | Regressed Means | | Repeat-ability | Correlation Among Replicates |
|-------|--------------------|---------------|------|------|----------------|------------------------------|
| | | | Min. | Max. | | |
| Percent mortality to 150 days or subsequent age at housing | New Jersey, & California-cage | 4.58 | 3.8 | 5.3 | 0.030 | 0.641 |
| Percent laying house mortality computed from 150 days or subsequent age at housing to 500 days of age. | Intermountain | 12.70 | 7.2 | 18.0 | .148 | .148 |
| Days of age to 50% production calculated from the first day of the first two consecutive days of 50% production for living birds in the entry at that time. | None | 174.07 | 159 | 193 | .512 | .512 |

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| Trait | Tests Not Included | Overall Means | Regressed Means | | Repeat-ability | Correlation Among Replicates |
|-------|--------------------|---------------|-----------------|---|---------------|------------------------------|
| | | | Min. | Max. | | |
| Number of eggs per pullet housed to 500 days of age. | Intermountain | 213.09 | 195.2 | 238.5 | 0.363 | 0.503 |
| Percent hen-day production from the time the birds reached 50% production to 500 days of age. | Intermountain | 68.00 | 64.1 | 74.1 | .346 | .463 |
| Income over feed and chick cost per pullet housed, with chick cost in 1,000 lots at hatch date adjusted for mortality (accidental deaths, sexing errors and missing chicks not included). | California-cage, & Iowa | 2.24 | 1.75 | 2.60 | .219 | .453 |
| Pounds of feed per 24 ounces of egg produced, computed from a bulk weighing of eggs one day every two weeks or at least 2 days a month at equal intervals. | California-cage, & Iowa | 4.42 | 4.07 | 4.79 | .408 | .626 |
| Average annual egg weight computed from bulk weighings at least every two weeks or two days a month at equal intervals. | None | 24.53 | 23.5 | 25.5 | .532 | .575 |
| Body weight at end of test | None | 4.73 | 4.0 | 6.6 | .892 | .904 |
| Albumen quality-Haugh Units measured on one day's eggs per quarter or every three months, at equal intervals, broken-out basis. | Intermountain, New Hampshire, & Texas | 81.80 | 72.0 | 87.1 | .607 | .656 |
| Percentage of eggs with (one or more) large blood spots 1/8 inch or more, computed from at least 3 days eggs per quarter, broken-out basis. | Intermountain, Iowa Minnesota, & New Hampshire | 2.29 | .9 | 3.7 | .248 | .248 |
| Percentage of eggs with (one or more) small blood spots less than 1/8 inch, computed from at least 3 days eggs per quarter, broken-out basis. | Intermountain, Iowa Minnesota, & New Hampshire | 3.72 | 2.1 | 5.6 | .203 | .203 |
| Percentage of eggs with (one or more) large colored meat spots 1/8 inch or more, computed from at least 3 days eggs per quarter, broken-out basis. | Intermountain, Iowa Minnesota, New Hampshire, New Jersey, Central N. Y., & Western N. Y. | 1.98 | 0.0 | 16.5 | .680 | .939 |
| Percentage of eggs with (one or more) small colored meat spots less than 1/8 inch, computed from at least 3 days eggs per quarter, broken-out basis. | Intermountain, Iowa Minnesota, New Hampshire, New Jersey, Central N. Y., & Western N. Y. | 4.51 | .1 | 30.2 | .896 | .944 |
| Shell thickness by direct measurement to nearest 1/1000 inch from at least one breakout each quarter. | Intermountain, New Hampshire, & Texas | .140 | .134 | .144 | .321 | .321 |

| STOCK CODE | BREEDER'S NAME AND ADDRESS | BREEDING | STRAIN OR TRADENAME | MORTALITY | | | |
|---|---|---|---|---|---|---|---|
| | | | | GROWING (%) | | LAYING (%) | |
| | | | | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE |
| 1 | A & M Poultry Farm & Hatchery Santa Rosa, California | WL PS | One Grade | 4. 5 | 4. 1 4. 9 | 12. 3 | 8. 4 16. 2 |
| 2 | Allstate Hatchery Willmar, Minnesota | WL SX | LX 300 | 4. 5 | 4. 1 4. 9 | 11. 5 | 7. 6 15. 4 |
| 3 | Allstate Hatchery Willmar, Minnesota | WL SX | LX 330 | 4. 8 | 4. 4 5. 2 | 12. 8 | 8. 9 16. 7 |
| 4 | Ames In-Cross Des Moines, Iowa | INX | 415 B | 4. 6 | 4. 2 5. 0 | 12. 0 | 8. 1 15. 9 |
| 5 | Ames In-Cross Des Moines, Iowa | INX | 424 | 4. 6 | 4. 2 5. 0 | 14. 4 | 10. 5 18. 3 |
| 6 | Ames In-Cross Des Moines, Iowa | INX | 434 | 4. 2 | 3. 8 4. 6 | 12. 5 | 8. 6 16. 4 |
| 7 | Ames In-Cross Des Moines, Iowa | INX | 434 R | 4. 6 | 4. 2 5. 0 | 12. 3 | 8. 4 16. 2 |
| 8 | Ames In-Cross Des Moines, Iowa | INX | 505 | 4. 7 | 4. 3 5. 1 | 9. 9 | 6. 0 13. 8 |
| 10 | Anthony, Geo. M & Sons Strausstown, Pennsylvania | WL SX | Anthony | 4. 4 | 4. 0 4. 8 | 10. 9 | 7. 0 14. 8 |
| 1 38 | Arbor Acres Farm, Mt. Hope Div. North Stonington, Connecticut | WL SX | Mt. Hope Queen | 4. 2 | 3. 8 4. 6 | 14. 4 | 10. 5 18. 3 |
| 11 | Avery, T. C. & Son Colrain, Massachusetts | WR x RIR BX | Avery | 5. 3 | 4. 9 5. 7 | 16. 5 | 12. 6 20. 4 |
| 12 | Babcock Poultry Farm Box 286, Ithaca, New York | WL SX | Barbara Ann | 4. 6 | 4. 2 5. 0 | 12. 9 | 9. 0 16. 8 |
| 13 | Babcock Poultry Farm Box 286, Ithaca, New York | WL SX | Bessie | 4. 7 | 4. 3 5. 1 | 11. 9 | 8. 0 15. 8 |
| 15 | Bagby Poultry Farm Sedalia, Missouri | WL PS | One Grade | 4. 5 | 4. 1 4. 9 | 12. 4 | 8. 5 16. 3 |
| 16 | Bagby Poultry Farm Sedalia, Missouri | RIR PS | Production Red | 4. 5 | 4. 1 4. 9 | 13. 2 | 9. 3 17. 1 |
| 17 | Ball Poultry Farm Owego, New York | WL SX | 551 | 4. 7 | 4. 3 5. 1 | 13. 0 | 9. 1 16. 9 |

\* If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

| AGE AT 50% PRODUCTION (Days) | | EGG PRODUCTION HEN HOUSED (No.) | | EGG PRODUCTION HEN DAY (%) | | INCOME OVER FEED AND CHICK COST ($) | | FEED PER 24 OZ. OF EGGS PRODUCED (lbs) | | EGG WEIGHT (oz) | | BODY WEIGHT (lbs) | | STOCK CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE | |
| 175 | 169 / 181 | 211.4 | 228.1 / 194.7 | 66.9 | 70.6 / 63.2 | 2.12 | 2.43 / 1.81 | 4.51 | 4.22 / 4.80 | 24.1 | 24.6 / 23.6 | 4.5 | 4.2 / 4.8 | 1 |
| 177 | 171 / 183 | 217.3 | 234.0 / 200.6 | 68.6 | 72.3 / 64.9 | 2.24 | 2.55 / 1.93 | 4.44 | 4.15 / 4.73 | 24.9 | 25.4 / 24.4 | 4.4 | 4.1 / 4.7 | 2 |
| 174 | 168 / 180 | 218.1 | 234.8 / 201.4 | 69.3 | 73.0 / 65.6 | 2.24 | 2.55 / 1.93 | 4.44 | 4.15 / 4.73 | 24.8 | 25.3 / 24.3 | 4.8 | 4.5 / 5.1 | 3 |
| 165 | 159 / 171 | 225.8 | 242.5 / 209.1 | 69.4 | 73.1 / 65.7 | 2.22 | 2.53 / 1.91 | 4.41 | 4.12 / 4.70 | 24.2 | 24.7 / 23.7 | 4.9 | 4.6 / 5.2 | 4 |
| 169 | 163 / 175 | 210.9 | 227.6 / 194.2 | 67.6 | 71.3 / 63.9 | 1.98 | 2.29 / 1.67 | 4.53 | 4.24 / 4.82 | 24.0 | 24.5 / 23.5 | 4.8 | 4.5 / 5.1 | 5 |
| 161 | 155 / 167 | 230.9 | 247.6 / 214.2 | 71.7 | 75.4 / 68.0 | 2.25 | 2.56 / 1.94 | 4.34 | 4.05 / 4.63 | 24.0 | 24.5 / 23.5 | 5.0 | 4.7 / 5.3 | 6 |
| 159 | 153 / 165 | 217.6 | 234.3 / 200.9 | 67.6 | 71.3 / 63.9 | 2.09 | 2.40 / 1.78 | 4.56 | 4.27 / 4.85 | 23.6 | 24.1 / 23.1 | 4.9 | 4.6 / 5.2 | 7 |
| 168 | 162 / 174 | 229.8 | 246.5 / 213.1 | 69.8 | 73.5 / 66.1 | 2.15 | 2.46 / 1.84 | 4.47 | 4.18 / 4.76 | 24.5 | 25.0 / 24.0 | 5.9 | 5.6 / 6.2 | 8 |
| 171 | 165 / 177 | 227.6 | 244.3 / 210.9 | 70.7 | 74.4 / 67.0 | 2.37 | 2.68 / 2.06 | 4.35 | 4.06 / 4.64 | 24.5 | 25.0 / 24.0 | 4.8 | 4.5 / 5.1 | 10 |
| 175 | 169 / 181 | 226.5 | 243.2 / 209.8 | 72.5 | 76.2 / 68.8 | 2.42 | 2.73 / 2.11 | 4.20 | 3.91 / 4.49 | 24.5 | 25.0 / 24.0 | 4.2 | 3.9 / 4.5 | 138 |
| 177 | 171 / 183 | 213.1 | 229.8 / 196.4 | 71.8 | 75.5 / 68.1 | 2.15 | 2.46 / 1.84 | 4.78 | 4.49 / 5.07 | 24.2 | 24.7 / 23.7 | 5.9 | 5.6 / 6.2 | 11 |
| 173 | 167 / 179 | 216.7 | 233.4 / 200.0 | 69.5 | 73.2 / 65.8 | 2.26 | 2.57 / 1.95 | 4.33 | 4.04 / 4.62 | 24.4 | 24.9 / 23.9 | 4.5 | 4.2 / 4.8 | 12 |
| 175 | 169 / 181 | 222.7 | 239.4 / 206.0 | 71.0 | 74.7 / 67.3 | 2.35 | 2.66 / 2.04 | 4.25 | 3.96 / 4.54 | 24.7 | 25.2 / 24.2 | 4.3 | 4.0 / 4.6 | 13 |
| 168 | 162 / 174 | 220.9 | 237.6 / 204.2 | 69.8 | 73.5 / 66.1 | 2.33 | 2.64 / 2.02 | 4.36 | 4.07 / 4.65 | 24.6 | 25.1 / 24.1 | 5.1 | 4.8 / 5.4 | 15 |
| 172 | 166 / 178 | 213.1 | 229.8 / 196.4 | 68.4 | 72.1 / 64.7 | 2.25 | 2.56 / 1.94 | 4.42 | 4.13 / 4.71 | 24.1 | 24.6 / 23.6 | 5.3 | 5.0 / 5.6 | 16 |
| 176 | 170 / 182 | 224.4 | 241.1 / 207.7 | 72.1 | 75.8 / 68.4 | 2.41 | 2.72 / 2.10 | 4.26 | 3.97 / 4.55 | 24.6 | 25.1 / 24.1 | 4.3 | 4.0 / 4.6 | 17 |

\* If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

| STOCK CODE | BREEDER'S NAME AND ADDRESS | BREEDING | STRAIN OR TRADENAME | MORTALITY | | | |
|---|---|---|---|---|---|---|---|
| | | | | GROWING (%) | | LAYING (%) | |
| | | | | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE |
| 18 | Ballew, Ken, Hatchery Mansfield, Missouri | WL SX | Ballew | 4.7 | 4.3 5.1 | 15.0 | 11.1 18.9 |
| 20 | Beamsdale Farm Rt. 2, Lawndale, North Carolina | WL SX | Beamsdale 66 | 4.5 | 4.1 4.9 | 16.3 | 12.4 20.2 |
| 22 | Booth Farms & Hatchery Clinton, Missouri | INX | Booth Line 351 | 4.6 | 4.2 5.0 | 12.9 | 9.0 16.8 |
| 23 | Booth Farms & Hatchery Clinton, Missouri | WL PS | Booth | 4.6 | 4.2 5.0 | 12.9 | 9.0 16.8 |
| 24 | Brender's Leghorn Farm Ferndale, New York | WL SX | 1234 | 4.2 | 3.8 4.6 | 10.4 | 6.5 14.3 |
| 25 | Bulkley's Leghorns Odessa, New York | WL SX | Bulkley | --- | --- --- | 11.1 | 7.2 15.0 |
| 26 | Bundesen Bros. Petaluma, California | CG x WL BX | Graycie | 4.5 | 4.1 4.9 | 12.7 | 8.8 16.6 |
| 27 | Burr's Poultry Farm Tunkhannock, Pennsylvania | WL LX | LC 89 | 4.7 | 4.3 5.1 | 14.4 | 10.5 18.3 |
| 28 | Butler County Hatchery Poplar Bluff, Missouri | WL PS | Supreme Grade | 4.9 | 4.5 5.3 | 14.1 | 10.2 18.0 |
| 29 | Cameron Hatchery Beaver Springs, Pennsylvania | WL SX | DMX | 4.5 | 4.1 4.9 | 12.2 | 8.3 16.1 |
| 30 | Carey Farms Rt. 7, Marion, Ohio | WL SX | Carey Nicks | 4.6 | 4.2 5.0 | 11.0 | 7.1 14.9 |
| 31 | Cashman Leghorn Farm Webster, Kentucky | WL SX | Hi-Cash | 4.2 | 3.8 4.6 | 12.3 | 8.4 16.2 |
| 32 | Childers Hatchery Santa Ana, California | CG x WL BX | Childers | 4.5 | 4.1 4.9 | 12.0 | 8.1 15.9 |
| 33 | Clark's Hatchery Rock Falls, Wisconsin | WL SX | Nu-Line 308 | 4.6 | 4.2 5.0 | 12.8 | 8.9 16.7 |
| 34 | Colonial Poultry Farms Pleasant Hill, Missouri | WL PS | Best Egg Grade | 4.5 | 4.1 4.9 | 13.2 | 9.3 17.1 |
| 35 | Colonial Poultry Farms Pleasant Hill, Missouri | WL IN | True Line 365 | 4.9 | 4.5 5.3 | 15.6 | 11.7 19.5 |

* If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

| AGE AT 50% PRODUCTION (Days) | | EGG PRODUCTION | | | | INCOME OVER FEED AND CHICK COST ($) | | FEED PER 24 OZ. OF EGGS PRODUCED (lbs) | | EGG WEIGHT (oz) | | BODY WEIGHT (lbs) | | STOCK CODE |
| | | HEN HOUSED (No.) | | HEN DAY (%) | | | | | | | | | | |
| RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | |
| 177 | 171 183 | 195. 4 | 212. 1 178. 7 | 64. 5 | 68. 2 60. 8 | 1. 99 | 2. 30 1. 68 | 4. 66 | 4. 37 4. 95 | 24. 2 | 24. 7 23. 7 | 4. 8 | 4. 5 5. 1 | 18 |
| 176 | 170 182 | 214. 1 | 230. 8 197. 4 | 71. 8 | 75. 5 68. 1 | 2. 34 | 2. 65 2. 03 | 4. 30 | 4. 01 4. 59 | 24. 1 | 24. 6 23. 6 | 4. 2 | 3. 9 4. 5 | 20 |
| 172 | 166 178 | 214. 8 | 231. 5 198. 1 | 67. 8 | 71. 5 64. 1 | 2. 04 | 2. 35 1. 73 | 4. 52 | 4. 23 4. 81 | 24. 9 | 25. 4 24. 4 | 4. 3 | 4. 0 4. 6 | 22 |
| 172 | 166 178 | 215. 1 | 231. 8 198. 4 | 68. 5 | 72. 2 64. 8 | 2. 23 | 2. 54 1. 92 | 4. 42 | 4. 13 4. 71 | 24. 2 | 24. 7 23. 7 | 4. 6 | 4. 3 4. 9 | 23 |
| 176 | 170 182 | 222. 5 | 239. 2 205. 8 | 70. 0 | 73. 7 66. 3 | 2. 31 | 2. 62 2. 00 | 4. 34 | 4. 05 4. 63 | 25. 5 | 26. 0 25. 0 | 4. 5 | 4. 2 4. 8 | 24 |
| 174 | 168 180 | 220. 3 | 237. 0 203. 6 | 68. 5 | 72. 2 64. 8 | 2. 29 | 2. 60 1. 98 | 4. 37 | 4. 08 4. 66 | 24. 5 | 25. 0 24. 0 | 4. 0 | 3. 7 4. 3 | 25 |
| 170 | 164 176 | 227. 6 | 244. 3 210. 9 | 70. 6 | 74. 3 66. 9 | 2. 26 | 2. 57 1. 95 | 4. 44 | 4. 15 4. 73 | 24. 7 | 25. 2 24. 2 | 5. 2 | 4. 9 5. 5 | 26 |
| 177 | 171 183 | 213. 1 | 229. 8 196. 4 | 70. 3 | 74. 0 66. 6 | 2. 20 | 2. 51 1. 89 | 4. 44 | 4. 15 4. 73 | 24. 3 | 24. 8 23. 8 | 4. 5 | 4. 2 4. 8 | 27 |
| 179 | 173 185 | 197. 6 | 214. 3 180. 9 | 64. 1 | 67. 8 60. 4 | 2. 01 | 2. 32 1. 70 | 4. 67 | 4. 38 4. 96 | 23. 6 | 24. 1 23. 1 | 4. 6 | 4. 3 4. 9 | 28 |
| 174 | 168 180 | 225. 9 | 242. 6 209. 2 | 71. 0 | 74. 7 67. 3 | 2. 39 | 2. 70 2. 08 | 4. 16 | 3. 87 4. 45 | 24. 3 | 24. 8 23. 8 | 4. 4 | 4. 1 4. 7 | 29 |
| 171 | 165 177 | 223. 4 | 240. 1 206. 7 | 69. 8 | 73. 5 66. 1 | 2. 33 | 2. 64 2. 02 | 4. 32 | 4. 03 4. 61 | 24. 5 | 25. 0 24. 0 | 4. 6 | 4. 3 4. 9 | 30 |
| 171 | 165 177 | 234. 2 | 250. 9 217. 5 | 73. 8 | 77. 5 70. 1 | 2. 39 | 2. 70 2. 08 | 4. 31 | 4. 02 4. 60 | 24. 2 | 24. 7 23. 7 | 4. 9 | 4. 6 5. 2 | 31 |
| 166 | 160 172 | 231. 2 | 247. 9 214. 5 | 71. 7 | 75. 4 68. 0 | 2. 39 | 2. 70 2. 08 | 4. 31 | 4. 02 4. 60 | 24. 8 | 25. 3 24. 3 | 5. 2 | 4. 9 5. 5 | 32 |
| 175 | 169 181 | 218. 1 | 234. 8 201. 4 | 70. 1 | 73. 8 66. 4 | 2. 27 | 2. 58 1. 96 | 4. 35 | 4. 06 4. 64 | 24. 5 | 25. 0 24. 0 | 4. 3 | 4. 0 4. 6 | 33 |
| 177 | 171 183 | 206. 7 | 223. 4 190. 0 | 66. 7 | 70. 4 63. 0 | 2. 15 | 2. 46 1. 84 | 4. 59 | 4. 30 4. 88 | 24. 6 | 25. 1 24. 1 | 4. 6 | 4. 3 4. 9 | 34 |
| 175 | 169 181 | 214. 0 | 230. 7 197. 3 | 69. 9 | 73. 6 66. 2 | 2. 08 | 2. 39 1. 77 | 4. 46 | 4. 17 4. 75 | 24. 3 | 24. 8 23. 8 | 4. 3 | 4. 0 4. 6 | 35 |

\* If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

| STOCK CODE | BREEDER'S NAME AND ADDRESS | BREEDING | STRAIN OR TRADENAME | MORTALITY | | | |
|---|---|---|---|---|---|---|---|
| | | | | GROWING (%) | | LAYING (%) | |
| | | | | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE |
| 213 | Colonial Poultry Farms<br>Pleasant Hill, Missouri | WL<br>SX | West Line 702 | 4.6 | 4.2<br>5.0 | 12.2 | 8.3<br>16.1 |
| 37 | Cornell University<br>Ithaca, New York | WL<br>PS | Random Bred | 4.9 | 4.5<br>5.3 | 12.6 | 8.7<br>16.5 |
| 42 | Darby Leghorn Farm<br>Somerville, New Jersey | WL<br>SX | Darby DX | 4.3 | 3.9<br>4.7 | 10.7 | 6.8<br>14.6 |
| 43 | Darby Leghorn Farm<br>Somerville, New Jersey | WL<br>PS | Darby Pure | 4.8 | 4.4<br>5.2 | 12.8 | 8.9<br>16.7 |
| 45 | DeKalb Agricultural Association<br>Sycamore, Illinois | INX | 101 | 4.3 | 3.9<br>4.7 | 10.7 | 6.8<br>14.6 |
| 46 | DeKalb Agricultural Association<br>Sycamore, Illinois | INX | 111 | 4.5 | 4.1<br>4.9 | 11.2 | 7.3<br>15.1 |
| 47 | DeKalb Agricultural Association<br>Sycamore, Illinois | INX | 121 | 4.6 | 4.2<br>5.0 | 11.2 | 7.3<br>15.1 |
| 48 | DeKalb Agricultural Association<br>Sycamore, Illinois | INX | 131 | 4.1 | 3.7<br>4.5 | 9.5 | 5.6<br>13.4 |
| 49 | Del Rio Hatchery<br>Mesa, Arizona | RIR<br>PS | A | 4.6 | 4.2<br>5.0 | 11.9 | 8.0<br>15.8 |
| 50 | Del Rio Hatchery<br>Mesa, Arizona | RIR<br>PS | B | 4.6 | 4.2<br>5.0 | 12.7 | 8.8<br>16.6 |
| 51 | Demler Farms<br>Anaheim, California | WL<br>SX | One Grade | 4.6 | 4.2<br>5.0 | 12.6 | 8.7<br>16.5 |
| 52 | Demler Farms<br>Anaheim, California | Syn x WL<br>BX | Demler Kross | 4.5 | 4.1<br>4.9 | 10.5 | 6.6<br>14.4 |
| 224 | Dirkse Leghorn Farm<br>Zeeland, Michigan | WL<br>PS | Dirkse Superior | 4.6 | 4.2<br>5.0 | 12.3 | 8.4<br>16.2 |
| 53 | Douglaston Manor Farm<br>Pulaski, New York | RIR<br>PS | Commercial | 4.8 | 4.4<br>5.2 | 14.1 | 10.2<br>18.0 |
| 54 | Drake, John W.<br>Skillman, New Jersey | WL<br>PS | One Grade | --- | ---<br>--- | 17.3 | 13.4<br>21.2 |
| 55 | Eby's Poultry Farm<br>Carrollton, Texas | WL<br>SX | Grade #1 | 4.7 | 4.3<br>5.1 | 11.2 | 7.3<br>15.1 |

\* If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

| AGE AT 50% PRODUCTION (Days) | | EGG PRODUCTION HEN HOUSED (No.) | | EGG PRODUCTION HEN DAY (%) | | INCOME OVER FEED AND CHICK COST ($) | | FEED PER 24 OZ. OF EGGS PRODUCED (lbs) | | EGG WEIGHT (oz) | | BODY WEIGHT (lbs) | | STOCK CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | |
| 171 | 165 / 177 | 220.5 | 237.2 / 203.8 | 68.3 | 72.0 / 64.6 | 2.21 | 2.52 / 1.90 | 4.41 | 4.12 / 4.70 | 24.0 | 24.5 / 23.5 | 4.6 | 4.3 / 4.9 | 213 |
| 174 | 168 / 180 | 222.1 | 238.8 / 205.4 | 70.5 | 74.2 / 66.8 | 2.08 | 2.39 / 1.77 | 4.50 | 4.21 / 4.79 | 24.0 | 24.5 / 23.5 | 4.5 | 4.2 / 4.8 | 37 |
| 179 | 173 / 185 | 225.6 | 242.3 / 208.9 | 70.6 | 74.3 / 66.9 | 2.37 | 2.68 / 2.06 | 4.35 | 4.06 / 4.64 | 25.0 | 25.5 / 24.5 | 4.4 | 4.1 / 4.7 | 42 |
| 175 | 169 / 181 | 223.1 | 239.8 / 206.4 | 70.3 | 74.0 / 66.6 | 2.17 | 2.48 / 1.86 | 4.55 | 4.26 / 4.84 | 24.1 | 24.6 / 23.6 | 4.8 | 4.5 / 5.1 | 43 |
| 169 | 163 / 175 | 224.2 | 240.9 / 207.5 | 68.8 | 72.5 / 65.1 | 2.27 | 2.58 / 1.96 | 4.20 | 3.91 / 4.49 | 24.6 | 25.1 / 24.1 | 4.5 | 4.2 / 4.8 | 45 |
| 173 | 167 / 179 | 219.1 | 235.8 / 202.4 | 68.4 | 72.1 / 64.7 | 2.27 | 2.58 / 1.96 | 4.28 | 3.99 / 4.57 | 25.1 | 25.6 / 24.6 | 4.4 | 4.1 / 4.7 | 46 |
| 170 | 164 / 176 | 222.4 | 239.1 / 205.7 | 69.1 | 72.8 / 65.4 | 2.29 | 2.60 / 1.98 | 4.29 | 4.00 / 4.58 | 25.0 | 25.5 / 24.5 | 4.6 | 4.3 / 4.9 | 47 |
| 165 | 159 / 171 | 238.5 | 255.2 / 221.8 | 73.0 | 76.7 / 69.3 | 2.48 | 2.79 / 2.17 | 4.07 | 3.78 / 4.36 | 24.1 | 24.6 / 23.6 | 4.3 | 4.0 / 4.6 | 48 |
| 171 | 165 / 177 | 212.8 | 229.5 / 196.1 | 67.0 | 70.7 / 63.3 | 2.07 | 2.38 / 1.76 | 4.70 | 4.41 / 4.99 | 24.2 | 24.7 / 23.7 | 5.9 | 5.6 / 6.2 | 49 |
| 172 | 166 / 178 | 209.0 | 225.7 / 192.3 | 66.1 | 69.8 / 62.4 | 2.20 | 2.51 / 1.89 | 4.71 | 4.42 / 5.00 | 24.3 | 24.8 / 23.8 | 5.6 | 5.3 / 5.9 | 50 |
| 171 | 165 / 177 | 213.4 | 230.1 / 196.7 | 68.3 | 72.0 / 64.6 | 2.27 | 2.58 / 1.96 | 4.31 | 4.02 / 4.60 | 24.5 | 25.0 / 24.0 | 4.1 | 3.8 / 4.4 | 51 |
| 164 | 158 / 170 | 226.1 | 242.8 / 209.4 | 69.2 | 72.9 / 65.5 | 2.30 | 2.61 / 1.99 | 4.40 | 4.11 / 4.69 | 24.2 | 24.7 / 23.7 | 4.9 | 4.6 / 5.2 | 52 |
| 174 | 168 / 180 | 228.8 | 245.5 / 212.1 | 72.8 | 76.5 / 69.1 | 2.18 | 2.49 / 1.87 | 4.51 | 4.22 / 4.80 | 24.0 | 24.5 / 23.5 | 4.6 | 4.3 / 4.9 | 224 |
| 183 | 177 / 189 | 202.8 | 219.5 / 186.1 | 66.8 | 70.5 / 63.1 | 2.04 | 2.35 / 1.73 | 4.76 | 4.47 / 5.05 | 24.3 | 24.8 / 23.8 | 5.5 | 5.2 / 5.8 | 53 |
| 176 | 170 / 182 | 195.2 | 211.9 / 178.5 | 65.5 | 69.2 / 61.8 | 1.94 | 2.25 / 1.63 | 4.70 | 4.41 / 4.99 | 24.4 | 24.9 / 23.9 | 4.6 | 4.3 / 4.9 | 54 |
| 173 | 167 / 179 | 218.7 | 235.4 / 202.0 | 68.1 | 71.8 / 64.4 | 2.26 | 2.57 / 1.95 | 4.49 | 4.20 / 4.78 | 24.7 | 25.2 / 24.2 | 4.1 | 3.8 / 4.4 | 55 |

\* If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

| STOCK CODE | BREEDER'S NAME AND ADDRESS | BREEDING | STRAIN OR TRADENAME | MORTALITY | | | |
|---|---|---|---|---|---|---|---|
| | | | | GROWING (%) | | LAYING (%) | |
| | | | | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE |
| 57 | Edmond's Trapnest Leghorns<br>Luverne, Minnesota | INX | X Cross 103 | 4. 7 | 4. 3<br>5. 1 | 14. 3 | 10. 4<br>18. 2 |
| 58 | Eelman Poultry Farm<br>Wayne, New Jersey | WL<br>PS | Eelman | --- | ---<br>--- | 13. 8 | 9. 9<br>17. 7 |
| 59 | Erath Egg Farm<br>Stephenville, Texas | WL<br>SX | Erath Str. X | 4. 6 | 4. 2<br>5. 0 | 11. 9 | 8. 0<br>15. 8 |
| 60 | Fletcher Hatchery<br>Concord, North Carolina | WL<br>SX | FX 100 | 4. 5 | 4. 1<br>4. 9 | 11. 4 | 7. 5<br>15. 3 |
| 61 | Ford's Leghorn Farm<br>Lockport, New York | WL<br>SX | Ford V88 | 4. 6 | 4. 2<br>5. 0 | 10. 8 | 6. 9<br>14. 7 |
| 62 | Forsgate Farms<br>Jamesburg, New Jersey | WL<br>SX | Forsgate | --- | ---<br>--- | 14. 5 | 10. 6<br>18. 4 |
| 63 | Fox-Den Farm<br>Cary, North Carolina | BX | Black Diamond | 4. 5 | 4. 1<br>4. 9 | 13. 2 | 9. 3<br>17. 1 |
| 65 | Garber Poultry Breeding Farm<br>Modesto, California | CG x WL<br>BX | Garber | 4. 5 | 4. 1<br>4. 9 | 11. 4 | 7. 5<br>15. 3 |
| 66 | Garber Poultry Breeding Farm<br>Modesto, California | WL<br>SX | G 200 | 4. 5 | 4. 1<br>4. 9 | 10. 0 | 6. 1<br>13. 9 |
| 67 | Garber Poultry Breeding Farm<br>Modesto, California | WL<br>SX | G 300 C | 4. 5 | 4. 1<br>4. 9 | 12. 8 | 8. 9<br>16. 7 |
| 69 | Garrison, Earl W.<br>Bridgeton, New Jersey | RIR x WR<br>BX | Golden Sex-Link | 4. 7 | 4. 3<br>5. 1 | 13. 4 | 9. 5<br>17. 3 |
| 70 | Gasson's Poultry Farm<br>Versailles, Ohio | WL<br>SX | G 33 | 4. 3 | 3. 9<br>4. 7 | 10. 9 | 7. 0<br>14. 8 |
| 72 | Ghostley's Poultry Farm<br>Anoka, Minnesota | WL<br>SX | Pearl | 4. 1 | 3. 7<br>4. 5 | 11. 7 | 7. 8<br>15. 6 |
| 74 | Graybill, L. J. Poultry Farm<br>McAlisterville, Pennsylvania | WL<br>PS | Graybill | 4. 7 | 4. 3<br>5. 1 | 14. 5 | 10. 6<br>18. 4 |
| 75 | Great Plains Hatcheries<br>Effingham, Illinois | RIR<br>PS | Egg Master | 4. 5 | 4. 1<br>4. 9 | 12. 1 | 8. 2<br>16. 0 |
| 76 | Great Plains Hatcheries<br>Effingham, Illinois | BX | Golden Cross | 4. 4 | 4. 0<br>4. 8 | 12. 9 | 9. 0<br>16. 8 |

\* If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

| AGE AT 50% PRODUCTION (Days) | | EGG PRODUCTION | | | | INCOME OVER FEED AND CHICK COST ($) | | FEED PER 24 OZ. OF EGGS PRODUCED (lbs) | | EGG WEIGHT (oz) | | BODY WEIGHT (lbs) | | STOCK CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | HEN HOUSED (No.) | | HEN DAY (%) | | | | | | | | | | |
| RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | |
| 182 | 176 188 | 210.4 | 227.1 193.7 | 69.2 | 72.9 65.5 | 2.09 | 2.40 1.78 | 4.75 | 4.46 5.04 | 24.1 | 24.6 23.6 | 5.2 | 4.9 5.5 | 57 |
| 184 | 178 190 | 209.7 | 226.4 193.0 | 70.8 | 74.5 67.1 | 2.22 | 2.53 1.91 | 4.37 | 4.08 4.66 | 24.7 | 25.2 24.2 | 4.2 | 3.9 4.5 | 58 |
| 176 | 170 182 | 218.5 | 235.2 201.8 | 69.5 | 73.2 65.8 | 2.32 | 2.63 2.01 | 4.27 | 3.98 4.56 | 24.7 | 25.2 24.2 | 4.1 | 3.8 4.4 | 59 |
| 175 | 169 181 | 218.7 | 235.4 202.0 | 68.5 | 72.2 64.8 | 2.38 | 2.69 2.07 | 4.36 | 4.07 4.65 | 25.0 | 25.5 24.5 | 4.3 | 4.0 4.6 | 60 |
| 177 | 171 183 | 222.7 | 239.4 206.0 | 70.2 | 73.9 66.5 | 2.20 | 2.51 1.89 | 4.48 | 4.19 4.77 | 24.3 | 24.8 23.8 | 4.9 | 4.6 5.2 | 61 |
| 181 | 175 187 | 205.5 | 222.2 188.8 | 67.7 | 71.4 64.0 | 2.13 | 2.44 1.82 | 4.52 | 4.23 4.81 | 24.5 | 25.0 24.0 | 4.2 | 3.9 4.5 | 62 |
| 174 | 168 180 | 205.2 | 221.9 188.5 | 66.5 | 70.2 62.8 | 1.90 | 2.21 1.59 | 4.63 | 4.34 4.92 | 24.7 | 25.2 24.2 | 5.8 | 5.5 6.1 | 63 |
| 165 | 159 171 | 230.7 | 247.4 214.0 | 71.9 | 75.6 68.2 | 2.31 | 2.62 2.00 | 4.35 | 4.06 4.64 | 24.7 | 25.2 24.2 | 4.8 | 4.5 5.1 | 65 |
| 172 | 166 178 | 228.7 | 245.4 212.0 | 71.3 | 75.0 67.6 | 2.39 | 2.70 2.08 | 4.28 | 3.99 4.57 | 24.6 | 25.1 24.1 | 4.2 | 3.9 4.5 | 66 |
| 176 | 170 182 | 219.0 | 235.7 202.3 | 69.7 | 73.4 66.0 | 2.33 | 2.64 2.02 | 4.32 | 4.03 4.61 | 24.6 | 25.1 24.1 | 4.3 | 4.0 4.6 | 67 |
| 177 | 171 183 | 205.0 | 221.7 288.3 | 67.0 | 70.7 63.3 | 2.16 | 2.47 1.85 | 4.57 | 4.28 4.86 | 25.3 | 25.8 24.8 | 6.1 | 5.8 6.4 | 69 |
| 169 | 163 175 | 233.5 | 250.2 216.8 | 72.5 | 76.2 68.8 | 2.54 | 2.85 2.23 | 4.12 | 3.83 4.41 | 24.5 | 25.0 24.0 | 4.3 | 4.0 4.6 | 70 |
| 175 | 169 181 | 227.7 | 244.4 211.0 | 71.9 | 75.6 68.2 | 2.39 | 2.70 2.08 | 4.29 | 4.00 4.58 | 24.5 | 25.0 24.0 | 4.4 | 4.1 4.7 | 72 |
| 177 | 171 183 | 202.0 | 218.7 185.3 | 67.3 | 71.0 63.6 | 2.01 | 2.32 1.70 | 4.69 | 4.40 4.98 | 24.8 | 25.3 24.3 | 4.9 | 4.6 5.2 | 74 |
| 174 | 168 180 | 216.4 | 233.1 199.7 | 68.2 | 71.9 64.5 | 2.34 | 2.65 2.03 | 4.42 | 4.13 4.71 | 24.8 | 25.3 24.3 | 5.7 | 5.4 6.0 | 75 |
| 175 | 169 181 | 214.1 | 230.8 197.4 | 68.3 | 72.0 64.6 | 2.33 | 2.64 2.02 | 4.41 | 4.12 4.70 | 25.1 | 25.6 24.6 | 5.6 | 5.3 5.9 | 76 |

\* If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

| STOCK CODE | BREEDER'S NAME AND ADDRESS | BREEDING | | STRAIN OR TRADENAME | MORTALITY | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | GROWING (%) | | LAYING (%) | |
| | | | | | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE |
| 78 | Hall Bros. Hatchery<br>Wallingford, Connecticut | WL | SX | Commercial | 4.4 | 4.0<br>4.8 | 11.2 | 7.3<br>15.1 |
| 79 | Hall Bros. Hatchery<br>Wallingford, Connecticut | | BX | Silver Hallcross | 4.7 | 4.3<br>5.1 | 13.6 | 9.7<br>17.5 |
| 80 | Hansen's Leghorn City<br>Puyallup, Washington | WL | SX | Criss Cross H25 | 4.5 | 4.1<br>4.9 | 11.1 | 7.2<br>15.0 |
| 82 | Hansen's Leghorn City<br>Puyallup, Washington | WL | SX | Criss Cross 61 | 4.5 | 4.1<br>4.9 | 13.0 | 9.1<br>16.9 |
| 83 | Hansen, P., Poultry Breeding Farm<br>Fresno, California | AW | BX | One Grade | 4.6 | 4.2<br>5.0 | 12.0 | 8.1<br>15.9 |
| 84 | Hanson, J. A. & Son<br>Corvallis, Oregon | WL | SX | Super Nick | 4.8 | 4.4<br>5.2 | 11.6 | 7.7<br>15.5 |
| 85 | Harco Orchards & Poultry Farms<br>South Easton, Massachusetts | RIR | PS | Flock Mating | 5.2 | 4.8<br>5.6 | 11.0 | 7.1<br>14.9 |
| 225 | Harco Orchards & Poultry Farms<br>South Easton, Massachusetts | RIR x BPR | BX | Sex Link | 4.5 | 4.1<br>4.9 | 15.2 | 11.3<br>19.1 |
| 86 | Hardy, C. Nelson & Son<br>Essex, Massachusetts | | BX | Sex Link | 4.5 | 4.1<br>4.9 | 15.1 | 11.2<br>19.0 |
| 87 | Harper's Poultry Farm<br>Freehold, New Jersey | WL | SX | Harper Huskie | 4.7 | 4.3<br>5.1 | 12.6 | 8.7<br>16.5 |
| 88 | Heisdorf & Nelson Farms<br>Kirkland, Washington | WL | SX | H & N Nick Chick | 4.4 | 4.0<br>4.8 | 9.0 | 5.1<br>12.9 |
| 89 | Heisdorf & Nelson Farms<br>Kirkland, Washington | CG x WL | BX | H & N | 4.6 | 4.2<br>5.0 | 11.7 | 7.8<br>15.6 |
| 90 | Hobart Poultry Farm<br>Hobart, New York | WL | PS | Hobart | 4.5 | 4.1<br>4.9 | 12.1 | 8.2<br>16.0 |
| 92 | Honegger Breeder Hatchery<br>Forrest, Illinois | WL | SX | Honegger Layer | 4.3 | 3.9<br>4.7 | 10.8 | 6.9<br>14.7 |
| 93 | Honegger Breeder Hatchery<br>Forrest, Illinois | WL | SX | Honegger Layer #62 | 4.5 | 4.1<br>4.9 | 11.5 | 7.6<br>15.4 |
| 95 | Hubbard Farms<br>Walpole, New Hampshire | RIR x NH | BX | H 496 | 4.9 | 4.5<br>5.3 | 17.3 | 13.4<br>21.2 |

* If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

| AGE AT 50% PRODUCTION (Days) | | EGG PRODUCTION | | | | INCOME OVER FEED AND CHICK COST ($) | | FEED PER 24 OZ. OF EGGS PRODUCED (lbs) | | EGG WEIGHT (oz) | | BODY WEIGHT (lbs) | | STOCK CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | HEN HOUSED (No.) | | HEN DAY (%) | | | | | | | | | | |
| REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE | |
| 178 | 172 184 | 220.1 | 236.8 203.4 | 69.1 | 72.8 65.4 | 2.29 | 2.60 1.98 | 4.43 | 4.14 4.72 | 24.7 | 25.2 24.2 | 4.4 | 4.1 4.7 | 78 |
| 166 | 160 172 | 212.5 | 229.2 195.8 | 67.5 | 71.2 63.8 | 2.23 | 2.54 1.92 | 4.62 | 4.33 4.91 | 24.4 | 24.9 23.9 | 6.6 | 6.3 6.9 | 79 |
| 169 | 163 175 | 228.2 | 244.9 211.5 | 70.9 | 74.6 67.2 | 2.42 | 2.73 2.11 | 4.22 | 3.93 4.51 | 24.8 | 25.3 24.3 | 4.6 | 4.3 4.9 | 80 |
| 172 | 166 178 | 219.5 | 236.2 202.8 | 70.0 | 73.7 66.3 | 2.23 | 2.54 1.92 | 4.32 | 4.03 4.61 | 24.5 | 25.0 24.0 | 4.3 | 4.0 4.6 | 82 |
| 170 | 164 176 | 223.1 | 239.8 206.4 | 70.4 | 74.1 66.7 | 2.27 | 2.58 1.96 | 4.41 | 4.12 4.70 | 25.2 | 25.7 24.7 | 5.2 | 4.9 5.5 | 83 |
| 169 | 163 175 | 225.0 | 241.7 208.3 | 70.1 | 73.8 66.4 | 2.30 | 2.61 1.99 | 4.33 | 4.04 4.62 | 23.5 | 24.0 23.0 | 4.4 | 4.1 4.7 | 84 |
| 175 | 169 181 | 216.6 | 233.3 199.9 | 69.1 | 72.8 65.4 | 2.17 | 2.48 1.86 | 4.56 | 4.27 4.85 | 25.3 | 25.8 24.8 | 5.8 | 5.5 6.1 | 85 |
| 174 | 168 180 | 209.0 | 225.7 192.3 | 66.9 | 70.6 63.2 | 2.26 | 2.57 1.95 | 4.77 | 4.48 5.06 | 25.1 | 25.6 24.6 | 5.9 | 5.6 6.2 | 225 |
| 177 | 171 183 | 200.4 | 217.1 183.7 | 65.3 | 69.0 61.6 | 2.18 | 2.49 1.87 | 4.79 | 4.50 5.08 | 25.0 | 25.5 24.5 | 6.4 | 6.1 6.7 | 86 |
| 179 | 173 185 | 212.4 | 229.1 195.7 | 67.8 | 71.5 64.1 | 2.16 | 2.47 1.85 | 4.51 | 4.22 4.80 | 24.7 | 25.2 24.2 | 4.4 | 4.1 4.7 | 87 |
| 168 | 162 174 | 235.4 | 252.1 218.7 | 72.5 | 76.2 68.8 | 2.41 | 2.72 2.10 | 4.31 | 4.02 4.60 | 23.9 | 24.4 23.4 | 4.3 | 4.0 4.6 | 88 |
| 165 | 159 171 | 237.6 | 254.3 220.9 | 72.8 | 76.5 69.1 | 2.34 | 2.65 2.03 | 4.34 | 4.05 4.63 | 24.6 | 25.1 24.1 | 5.0 | 4.7 5.3 | 89 |
| 173 | 167 179 | 210.6 | 227.3 193.9 | 66.9 | 70.6 63.2 | 2.08 | 2.39 1.77 | 4.57 | 4.28 4.86 | 24.3 | 24.8 23.8 | 4.5 | 4.2 4.8 | 90 |
| 177 | 171 183 | 227.6 | 244.3 210.9 | 72.1 | 75.8 68.4 | 2.40 | 2.71 2.09 | 4.27 | 3.98 4.56 | 24.4 | 24.9 23.9 | 4.3 | 4.0 4.6 | 92 |
| 172 | 166 178 | 224.2 | 240.9 207.5 | 70.0 | 73.7 66.3 | 2.28 | 2.59 1.97 | 4.40 | 4.11 4.69 | 24.2 | 24.7 23.7 | 4.8 | 4.5 5.1 | 93 |
| 172 | 166 178 | 209.1 | 225.8 192.4 | 68.4 | 72.1 64.7 | 2.10 | 2.41 1.79 | 4.69 | 4.40 4.98 | 24.8 | 25.3 24.3 | 6.0 | 5.7 6.3 | 95 |

* If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

| STOCK CODE | BREEDER'S NAME AND ADDRESS | BREEDING | STRAIN OR TRADENAME | MORTALITY | | | |
|---|---|---|---|---|---|---|---|
| | | | | GROWING (%) | | LAYING (%) | |
| | | | | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE |
| 97 | Hy-Line Poultry Farms Des Moines, Iowa | INX | 934 A | 4. 4 | 4. 0 4. 8 | 11. 2 | 7. 3 15. 1 |
| 99 | Hy-Line Poultry Farms Des Moines, Iowa | INX | 934 C | 3. 8 | 3. 4 4. 2 | 10. 5 | 6. 6 14. 4 |
| 101 | Ideal Hatchery & Poultry Farm Cameron, Texas | WL SX | H-3-W | 4. 4 | 4. 0 4. 8 | 14. 1 | 10. 2 18. 0 |
| 102 | Indian Head Hatchery Toms River, New Jersey | WL SX | Indian Head | --- | --- --- | 15. 2 | 11. 3 19. 1 |
| 103 | Indiana Farm Bureau Coop. Indianapolis, Indiana | WL SX | 10-33 | 4. 5 | 4. 1 4. 9 | 12. 7 | 8. 8 16. 6 |
| 104 | Indiana Farm Bureau Coop. Indianapolis, Indiana | WL SX | 10-42 | 4. 8 | 4. 4 5. 2 | 11. 6 | 7. 7 15. 5 |
| 106 | Jacobs Poultry Farm Aurora, New York | WL SX | Commercial | 4. 7 | 4. 3 5. 1 | 14. 2 | 10. 3 18. 1 |
| 107 | Kahn's Leghorn Farm Toms River, New Jersey | WL SX | Commercial | --- | --- --- | 13. 2 | 9. 3 17. 1 |
| 108 | Kerr, Dr. Hatcheries Minneota, Minnesota | WL IN | 409 C | 4. 5 | 4. 1 4. 9 | 12. 7 | 8. 8 16. 6 |
| 109 | Keystone Poultry Breeding Farm Ephrata, Pennsylvania | WL SX | Keystone Leghorns | 4. 6 | 4. 2 5. 0 | 11. 8 | 7. 9 15. 7 |
| 110 | Kimber Farms, Inc. Niles, California | WL SX | K 137 | 4. 5 | 4. 1 4. 9 | 7. 2 | 3. 3 11. 1 |
| 112 | Kimber Farms, Inc. Niles, California | WL SX | K 155 | 4. 2 | 3. 8 4. 6 | 10. 7 | 6. 8 14. 6 |
| 113 | Kruger's Poultry Breeding Farm Dinuba, California | WL SX | Commercial | 4. 5 | 4. 1 4. 9 | 14. 9 | 11. 0 18. 8 |
| 114 | Lakewood Egg Farm Lakewood, New Jersey | WL LX | Commercial | --- | --- --- | 13. 7 | 9. 8 17. 6 |
| 115 | Lasher Hatchery Petaluma, California | WL PS | Commercial | 4. 6 | 4. 2 5. 0 | 11. 4 | 7. 5 15. 3 |
| 116 | Lawton, A. C. & Sons Foxboro, Massachusetts | WPR PS | Certified Candidate | 4. 8 | 4. 4 5. 2 | 15. 2 | 11. 3 19. 1 |

\* If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

All Stocks Entered, with Regressed Means and LSD Range for each Trait, (Cont'd.)

| AGE AT 50% PRODUCTION (Days) | | EGG PRODUCTION | | | | INCOME OVER FEED AND CHICK COST ($) | | FEED PER 24 OZ. OF EGGS PRODUCED (lbs) | | EGG WEIGHT (oz) | | BODY WEIGHT (lbs) | | STOCK CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | HEN HOUSED (No.) | | HEN DAY (%) | | | | | | | | | | |
| REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE | |
| 172 | 166 / 178 | 223.1 | 239.8 / 206.4 | 70.1 | 73.8 / 66.4 | 2.35 | 2.66 / 2.04 | 4.23 | 3.94 / 4.52 | 25.0 | 25.5 / 24.5 | 4.2 | 3.9 / 4.5 | 97 |
| 169 | 163 / 175 | 234.5 | 251.2 / 217.8 | 73.2 | 76.9 / 69.5 | 2.40 | 2.71 / 2.09 | 4.09 | 3.80 / 4.38 | 24.9 | 25.4 / 24.4 | 4.0 | 3.7 / 4.3 | 99 |
| 173 | 167 / 179 | 223.0 | 239.7 / 206.3 | 71.9 | 75.6 / 68.2 | 2.36 | 2.67 / 2.05 | 4.25 | 3.96 / 4.54 | 24.8 | 25.3 / 24.3 | 4.3 | 4.0 / 4.6 | 101 |
| 169 | 163 / 175 | 212.9 | 229.6 / 196.2 | 69.5 | 73.2 / 65.8 | 2.18 | 2.49 / 1.87 | 4.45 | 4.16 / 4.74 | 24.6 | 25.1 / 24.1 | 4.6 | 4.3 / 4.9 | 102 |
| 180 | 174 / 186 | 214.1 | 230.8 / 197.4 | 67.5 | 71.2 / 63.8 | 2.19 | 2.50 / 1.88 | 4.51 | 4.22 / 4.80 | 25.0 | 25.5 / 24.5 | 4.4 | 4.1 / 4.7 | 103 |
| 179 | 173 / 185 | 218.0 | 234.7 / 201.3 | 69.9 | 73.6 / 66.2 | 2.19 | 2.50 / 1.88 | 4.39 | 4.10 / 4.68 | 24.1 | 24.6 / 23.6 | 4.6 | 4.3 / 4.9 | 104 |
| 183 | 177 / 189 | 205.5 | 222.2 / 188.8 | 67.4 | 71.1 / 63.7 | 2.01 | 2.32 / 1.70 | 4.55 | 4.26 / 4.84 | 24.7 | 25.2 / 24.2 | 4.6 | 4.3 / 4.9 | 106 |
| 177 | 171 / 183 | 220.6 | 237.3 / 203.9 | 70.4 | 74.1 / 66.7 | 2.29 | 2.60 / 1.98 | 4.42 | 4.13 / 4.71 | 24.7 | 25.2 / 24.2 | 4.6 | 4.3 / 4.9 | 107 |
| 165 | 159 / 171 | 225.3 | 242.0 / 208.6 | 70.2 | 73.9 / 66.5 | 2.41 | 2.72 / 2.10 | 4.10 | 3.81 / 4.39 | 24.8 | 25.3 / 24.3 | 4.6 | 4.3 / 4.9 | 108 |
| 179 | 173 / 185 | 221.8 | 238.5 / 205.1 | .69.6 | 73.3 / 65.9 | 2.39 | 2.70 / 2.08 | 4.34 | 4.05 / 4.63 | 24.8 | 25.3 / 24.3 | 4.5 | 4.2 / 4.8 | 109 |
| 167 | 161 / 173 | 237.9 | 254.6 / 221.2 | 72.5 | 76.2 / 68.8 | 2.60 | 2.91 / 2.29 | 4.16 | 3.87 / 4.45 | 25.0 | 25.5 / 24.5 | 4.3 | 4.0 / 4.6 | 110 |
| 164 | 158 / 170 | 233.4 | 250.1 / 216.7 | 71.8 | 75.5 / 68.1 | 2.45 | 2.76 / 2.14 | 4.26 | 3.97 / 4.55 | 24.6 | 25.1 / 24.1 | 4.6 | 4.3 / 4.9 | 112 |
| 174 | 168 / 180 | 212.8 | 229.5 / 196.1 | 69.4 | 73.1 / 65.7 | 2.11 | 2.42 / 1.80 | 4.48 | 4.19 / 4.77 | 24.3 | 24.8 / 23.8 | 4.4 | 4.1 / 4.7 | 113 |
| 185 | 179 / 191 | 209.2 | 225.9 / 192.5 | 69.0 | 72.7 / 65.3 | 2.18 | 2.49 / 1.87 | 4.42 | 4.13 / 4.71 | 24.6 | 25.1 / 24.1 | 4.6 | 4.3 / 4.9 | 114 |
| 173 | 167 / 179 | 226.9 | 243.6 / 210.2 | 71.1 | 74.8 / 67.4 | 2.36 | 2.67 / 2.05 | 4.37 | 4.08 / 4.66 | 24.4 | 24.9 / 23.9 | 4.8 | 4.5 / 5.1 | 115 |
| 181 | 175 / 187 | 198.2 | 214.9 / 181.5 | 65.5 | 69.2 / 61.8 | 2.02 | 2.33 / 1.71 | 4.62 | 4.33 / 4.91 | 24.7 | 25.2 / 24.2 | 5.6 | 5.3 / 5.9 | 116 |

* If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

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| STOCK CODE | BREEDER'S NAME AND ADDRESS | BREEDING | STRAIN OR TRADENAME | MORTALITY | | | |
|---|---|---|---|---|---|---|---|
| | | | | GROWING (%) | | LAYING (%) | |
| | | | | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE |
| 117 | Lawton, A. C. & Sons Foxboro, Massachusetts | RIR x WPR BX | Buff Sex Link | 4.6 | 4.2 5.0 | 13.8 | 9.9 17.7 |
| 118 | Leader, Guy A. & Sons York, Pennsylvania | WL SX | 10X | 4.5 | 4.1 4.9 | 13.3 | 9.4 17.2 |
| 248 | Lee's Poultry Farm Brookville, Ohio | WPR PS | Lee | 4.7 | 4.3 5.1 | 12.9 | 9.0 16.8 |
| 121 | Leonard's Hatchery Osage, Iowa | BX | Lanco 505 | 4.6 | 4.2 5.0 | 14.1 | 10.2 18.0 |
| 122 | Liechty's Poultry Farm Wauseon, Ohio | WL SX | L 240 | 4.4 | 4.0 4.8 | 12.4 | 8.5 16.3 |
| 124 | Lux Leghorn Land Farms Hopkinton, Iowa | WL SX | H-D-6 | 4.6 | 4.2 5.0 | 10.7 | 6.8 14.6 |
| 126 | Mathews Poultry Farm Burlington, Wisconsin | WL SX | M 138 | 4.5 | 4.1 4.9 | 14.8 | 10.9 18.7 |
| 127 | McDonald, Raymond, Hatchery Fort Worth, Texas | WL SX | McDonald | 4.6 | 4.2 5.0 | 12.2 | 7.8 16.1 |
| 128 | McDonald, Roy, Hatchery Dallas, Texas | WL SX | McDonald | 4.5 | 4.1 4.9 | 13.1 | 9.2 17.0 |
| 132 | Meadow View Hatchery Eau Claire, Wisconsin | WL SX | 3 way | 4.5 | 4.1 4.9 | 11.2 | 7.3 15.1 |
| 133 | Merryknoll Farms Attleboro, Massachusetts | BX | Merryknoll 400 | 4.5 | 4.1 4.9 | 15.4 | 11.5 19.3 |
| 134 | Midwest Poultry Farm Marshall, Missouri | WL PS | Best Egg Grade | 4.5 | 4.1 4.9 | 12.1 | 8.2 16.0 |
| 135 | Midwest Poultry Farm Marshall, Missouri | RIR PS | Production Red | 4.6 | 4.2 5.0 | 12.6 | 8.7 16.5 |
| 136 | Missouri Valley Hatchery Marshall, Missouri | WL PS | Best Egg Contest | 4.4 | 4.0 4.8 | 11.8 | 7.9 15.7 |
| 137 | Missouri Valley Hatchery Marshall, Missouri | BX | Ski Line Layers | 4.4 | 4.0 4.8 | 11.5 | 7.6 15.4 |
| 139 | Niles Poultry Breeding Farm Niles, California | WL SX | Niles | 4.6 | 4.2 5.0 | 10.0 | 6.1 13.9 |

* If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

| AGE AT 50% PRODUCTION (Days) | | EGG PRODUCTION | | | | INCOME OVER FEED AND CHICK COST ($) | | FEED PER 24 OZ. OF EGGS PRODUCED (lbs) | | EGG WEIGHT (oz) | | BODY WEIGHT (lbs) | | STOCK CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | HEN HOUSED (No.) | | HEN DAY (%) | | | | | | | | | | |
| RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | |
| 178 | 172 184 | 204.9 | 221.6 188.2 | 65.6 | 69.3 61.9 | 2.26 | 2.57 1.95 | 4.76 | 4.47 5.05 | 25.0 | 25.5 24.5 | 5.2 | 4.9 5.5 | 117 |
| 174 | 168 180 | 216.7 | 233.4 200.0 | 69.4 | 73.1 65.7 | 2.24 | 2.55 1.93 | 4.40 | 4.11 4.69 | 24.7 | 25.2 24.2 | 4.3 | 4.0 4.6 | 118 |
| 176 | 170 182 | 205.8 | 222.5 189.1 | 66.1 | 69.8 62.4 | 2.11 | 2.42 1.80 | 4.77 | 4.48 5.06 | 24.8 | 25.3 24.3 | 6.6 | 6.3 6.9 | 248 |
| 178 | 172 184 | 200.1 | 216.8 183.4 | 65.7 | 69.4 62.0 | 2.10 | 2.41 1.79 | 4.52 | 4.23 4.81 | 24.4 | 24.9 23.9 | 4.7 | 4.4 5.0 | 121 |
| 175 | 169 181 | 222.9 | 239.6 206.2 | 70.0 | 73.7 66.3 | 2.35 | 2.66 2.04 | 4.31 | 4.02 4.60 | 24.6 | 25.1 24.1 | 4.3 | 4.0 4.6 | 122 |
| 173 | 167 179 | 229.0 | 245.7 212.3 | 70.9 | 74.6 67.2 | 2.38 | 2.69 2.07 | 4.32 | 4.03 4.61 | 24.5 | 25.0 24.0 | 4.6 | 4.3 4.9 | 124 |
| 178 | 172 184 | 211.2 | 227.9 194.5 | 68.9 | 72.6 65.2 | 2.16 | 2.47 1.85 | 4.44 | 4.15 4.73 | 24.7 | 25.2 24.2 | 4.7 | 4.4 5.0 | 126 |
| 174 | 168 180 | 218.4 | 235.1 201.7 | 68.6 | 72.3 64.9 | 2.30 | 2.61 1.99 | 4.38 | 4.09 4.67 | 24.8 | 25.3 24.3 | 4.4 | 4.1 4.7 | 127 |
| 175 | 169 181 | 217.2 | 233.9 200.5 | 68.9 | 72.6 65.2 | 2.26 | 2.57 1.95 | 4.42 | 4.13 4.71 | 24.7 | 25.2 24.2 | 4.5 | 4.2 4.8 | 128 |
| 171 | 165 177 | 222.5 | 239.2 205.8 | 68.9 | 72.6 65.2 | 2.34 | 2.65 2.03 | 4.28 | 3.99 4.57 | 24.5 | 25.0 24.0 | 4.3 | 4.0 4.6 | 132 |
| 176 | 170 182 | 207.3 | 224.0 190.6 | 67.5 | 71.2 63.8 | 2.17 | 2.48 1.86 | 4.66 | 4.37 4.95 | 24.9 | 25.4 24.4 | 6.0 | 5.7 6.3 | 133 |
| 170 | 164 176 | 222.0 | 238.7 205.3 | 69.7 | 73.4 66.0 | 2.36 | 2.67 2.05 | 4.32 | 4.03 4.61 | 24.7 | 25.2 24.2 | 4.6 | 4.3 4.9 | 134 |
| 174 | 168 180 | 214.1 | 230.8 197.4 | 68.3 | 72.0 64.6 | 2.27 | 2.58 1.96 | 4.42 | 4.13 4.71 | 24.0 | 24.5 23.5 | 5.9 | 5.6 6.2 | 135 |
| 169 | 163 175 | 223.5 | 240.2 206.8 | 70.0 | 73.7 66.3 | 2.35 | 2.66 2.04 | 4.33 | 4.04 4.62 | 24.6 | 25.1 24.1 | 4.1 | 3.8 4.4 | 136 |
| 169 | 163 175 | 223.5 | 240.2 206.8 | 69.8 | 73.5 66.1 | 2.39 | 2.70 2.08 | 4.28 | 3.99 4.57 | 24.7 | 25.2 24.2 | 4.4 | 4.1 4.7 | 137 |
| 172 | 166 178 | 213.3 | 230.0 196.6 | 66.5 | 70.2 62.8 | 2.20 | 2.51 1.89 | 4.48 | 4.19 4.77 | 24.8 | 25.3 24.3 | 4.4 | 4.1 4.7 | 139 |

* If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

| STOCK CODE | BREEDER'S NAME AND ADDRESS | BREEDING | STRAIN OR TRADENAME | MORTALITY | | | |
|---|---|---|---|---|---|---|---|
| | | | | GROWING (%) | | LAYING (%) | |
| | | | | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE |
| 140 | Niles Poultry Breeding Farm<br>Niles, California | CG x WL<br>BX | Commercial | 4.6 | 4.2<br>5.0 | 11.7 | 7.8<br>15.6 |
| 141 | Nimton Leghorn Breeding Farm<br>Bridgeton, New Jersey | WL<br>SX | Nimton | 4.5 | 4.1<br>4.9 | 13.9 | 10.0<br>17.8 |
| 142 | Norco Poultry Breeding Farm<br>Norco, California | WL<br>PS | Grade A | 4.6 | 4.2<br>5.0 | 11.1 | 7.2<br>15.0 |
| 143 | Norris, Vernon<br>Valencia, Pennsylvania | WL<br>PS | Efficiency Leghorns | 4.6 | 4.2<br>5.0 | 14.8 | 10.9<br>18.7 |
| 144 | Oster, Jacob Poultry Farm<br>Flemington, New Jersey | WL<br>SX | Oster | --- | ---<br>--- | 11.5 | 7.6<br>15.4 |
| 145 | Ottawa Central Experimental Farm<br>Ottawa, Canada | WL<br>PS | Random Bred Control | 4.8 | 4.4<br>5.2 | 18.0 | 14.1<br>21.9 |
| 148 | Parmelee, Harold R.<br>Rockfall, Connecticut | BPR<br>PS | Certified | 4.7 | 4.3<br>5.1 | 14.1 | 10.2<br>18.0 |
| 149 | Parmenter Reds<br>Franklin, Massachusetts | RIR<br>PS | Certified | 4.7 | 4.3<br>5.1 | 13.5 | 9.6<br>17.4 |
| 151 | Peerless Hatchery<br>Spencer, Iowa | WL<br>SX | Peerless 262 | 4.4 | 4.0<br>4.8 | 11.6 | 7.7<br>15.5 |
| 152 | Pa. Farm Bureau Hatchery<br>Harrisburg, Pennsylvania | WL<br>SX | LSC 55 | 4.8 | 4.4<br>5.2 | 12.3 | 8.4<br>16.2 |
| 154 | Pillsbury Company<br>Clinton, Iowa | WL<br>SX | Maxi-Lay Queens | 4.4 | 4.0<br>4.8 | 13.0 | 9.1<br>16.9 |
| 157 | Purdue Regional USDA Laboratory<br>Lafayette, Indiana | RIR x WL<br>BX | Random Bred Control | 4.5 | 4.1<br>4.9 | 12.0 | 8.1<br>15.9 |
| 158 | Randall Hatchery & Breeding Farm<br>Montclair, California | WL<br>SX | Randall | 4.5 | 4.1<br>4.9 | 12.0 | 8.1<br>15.9 |
| 159 | Randall Hatchery & Breeding Farm<br>Montclair, California | CG x WL<br>BX | Randall | 4.5 | 4.1<br>4.9 | 10.8 | 6.9<br>14.7 |
| 160 | Rapp Leghorn Farm<br>Farmingdale, New Jersey | WL<br>SX | Rapp Linecross | 4.3 | 3.9<br>4.7 | 13.3 | 9.4<br>17.2 |
| 161 | Reid's Valley Hatchery<br>Spring Valley, Wisconsin | CG x WL<br>BX | VH 354 | 4.5 | 4.1<br>4.9 | 12.2 | 8.3<br>16.1 |

* If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

# All Stocks Entered, with Regressed Means and LSD Range for each Trait, (Cont'd.)

| AGE AT 50% PRODUCTION (Days) | | EGG PRODUCTION | | | | INCOME OVER FEED AND CHICK COST ($) | | FEED PER 24 OZ. OF EGGS PRODUCED (lbs) | | EGG WEIGHT (oz) | | BODY WEIGHT (lbs) | | STOCK CODE |
| | | HEN HOUSED (No.) | | HEN DAY (%) | | | | | | | | | | |
| REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 167 | 161 173 | 233.5 | 250.2 216.8 | 72.0 | 75.7 68.3 | 2.30 | 2.61 1.99 | 4.43 | 4.14 4.72 | 25.1 | 25.6 24.6 | 5.3 | 5.0 5.6 | 140 |
| 175 | 169 181 | 227.7 | 244.4 211.0 | 74.1 | 77.8 70.4 | 2.29 | 2.60 1.98 | 4.29 | 4.00 4.58 | 24.7 | 25.2 24.2 | 4.3 | 4.0 4.6 | 141 |
| 175 | 169 181 | 212.5 | 229.2 195.8 | 67.5 | 71.2 63.8 | 2.11 | 2.42 1.80 | 4.52 | 4.23 4.81 | 24.9 | 25.4 24.4 | 4.8 | 4.5 5.1 | 142 |
| 179 | 173 185 | 197.2 | 213.9 180.5 | 65.6 | 69.3 61.9 | 2.01 | 2.32 1.70 | 4.53 | 4.24 4.82 | 24.5 | 25.0 24.0 | 4.1 | 3.8 4.4 | 143 |
| 184 | 178 190 | 211.6 | 228.3 194.9 | 67.5 | 71.2 63.8 | 2.19 | 2.50 1.88 | 4.45 | 4.16 4.74 | 24.7 | 25.2 24.2 | 4.2 | 3.9 4.5 | 144 |
| 181 | 175 187 | 197.5 | 214.2 180.8 | 67.0 | 70.7 63.3 | 1.75 | 2.06 1.44 | 4.70 | 4.41 4.99 | 23.6 | 24.1 23.1 | 4.4 | 4.1 4.7 | 145 |
| 193 | 187 199 | 201.3 | 218.0 184.6 | 67.9 | 71.6 64.2 | 2.04 | 2.35 1.73 | 4.72 | 4.43 5.01 | 24.8 | 25.3 24.3 | 5.7 | 5.4 6.0 | 148 |
| 180 | 174 186 | 205.0 | 221.7 188.3 | 65.9 | 69.6 62.2 | 2.09 | 2.40 1.78 | 4.72 | 4.43 5.01 | 24.3 | 24.8 23.8 | 5.7 | 5.4 6.0 | 149 |
| 177 | 171 183 | 224.1 | 240.8 207.4 | 71.5 | 75.2 67.8 | 2.33 | 2.64 2.02 | 4.43 | 4.14 4.72 | 24.6 | 25.1 24.1 | 5.0 | 4.7 5.3 | 151 |
| 185 | 179 191 | 208.0 | 224.7 191.3 | 67.1 | 70.8 63.4 | 2.15 | 2.46 1.84 | 4.36 | 4.07 4.65 | 24.8 | 25.3 24.3 | 4.3 | 4.0 4.6 | 152 |
| 174 | 168 180 | 219.5 | 236.2 202.8 | 70.6 | 74.3 66.9 | 2.31 | 2.62 2.00 | 4.32 | 4.03 4.61 | 24.7 | 25.2 24.2 | 4.4 | 4.1 4.7 | 154 |
| 173 | 167 179 | 214.7 | 231.4 198.0 | 68.2 | 71.9 64.5 | 2.18 | 2.49 1.87 | 4.57 | 4.28 4.86 | 24.8 | 25.3 24.3 | 5.6 | 5.3 5.9 | 157 |
| 172 | 166 178 | 216.4 | 233.1 199.7 | 68.7 | 72.4 65.0 | 2.29 | 2.60 1.98 | 4.33 | 4.04 4.62 | 24.3 | 24.8 23.8 | 4.2 | 3.9 4.5 | 158 |
| 165 | 159 171 | 233.8 | 250.5 217.1 | 71.9 | 75.6 68.2 | 2.41 | 2.72 2.10 | 4.34 | 4.05 4.63 | 24.8 | 25.3 24.3 | 5.1 | 4.8 5.4 | 159 |
| 177 | 171 183 | 223.1 | 239.8 206.4 | 72.5 | 76.2 68.8 | 2.35 | 2.66 2.04 | 4.25 | 3.96 4.54 | 24.2 | 24.7 23.7 | 4.2 | 3.9 4.5 | 160 |
| 167 | 161 173 | 220.4 | 237.1 203.7 | 69.2 | 72.9 65.5 | 2.30 | 2.61 1.99 | 4.31 | 4.02 4.60 | 24.9 | 25.4 24.4 | 5.2 | 4.9 5.5 | 161 |

\* If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

| STOCK CODE | BREEDER'S NAME AND ADDRESS | BREEDING | STRAIN OR TRADENAME | MORTALITY | | | |
|---|---|---|---|---|---|---|---|
| | | | | GROWING (%) | | LAYING (%) | |
| | | | | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE |
| 164 | Richardson Poultry Breeding Farm Redlands, California | WA BX | Commercial | 4. 7 | 4. 3 5. 1 | 11. 8 | 7. 9 15. 7 |
| 165 | Richardson Poultry Breeding Farm Redlands, California | WA BX | Commercial MWA | 4. 5 | 4. 1 4. 9 | 12. 0 | 8. 1 15. 9 |
| 170 | Ruckers (Imperial) Poultry Farm Ottumwa, Iowa | INX | GW 389 A | 4. 7 | 4. 3 5. 1 | 11. 8 | 7. 9 15. 7 |
| 171 | Ruckers (Imperial) Poultry Farm Ottumwa, Iowa | INX | GW 389 C | 4. 5 | 4. 1 4. 9 | 11. 8 | 7. 9 15. 7 |
| 173 | Sand Hills Farm Almond, New York | WL PS | Commercial | 4. 5 | 4. 1 4. 9 | 9. 4 | 5. 5 13. 3 |
| 175 | Schaible, Louis D. Shiloh, New Jersey | WL SX | Commercial | 4. 8 | 4. 4 5. 2 | 11. 6 | 7. 7 15. 5 |
| 176 | Schaible, Louis D. Shiloh, New Jersey | WL SX | Commercial 2 | 4. 6 | 4. 2 5. 0 | 11. 8 | 7. 9 15. 7 |
| 177 | Schildmeyer's Poultry Breeding Fr. Orange, California | WL PS | Commercial | 4. 6 | 4. 2 5. 0 | 11. 1 | 7. 2 15. 0 |
| 178 | Schildmeyer's Poultry Breeding Fr. Orange, California | CG x WL BX | Commercial | 4. 5 | 4. 1 4. 9 | 13. 1 | 9. 2 17. 0 |
| 179 | Schubkegel, Martin Lakewood, New Jersey | WL SX | M&S Cross | --- | --- --- | 13. 8 | 9. 9 17. 7 |
| 180 | Schuyler Poultry Farms LeRoy, New York | WL SX | Egg Champs | 4. 6 | 4. 2 5. 0 | 10. 7 | 6. 8 14. 6 |
| 181 | Shaver Poultry Breeding Farm Galt, Ontario, Canada | WL SX | Starcross 288 | 4. 5 | 4. 1 4. 9 | 10. 5 | 6. 6 14. 4 |
| 182 | Shenango Valley Hatchery Greenville, Pennsylvania | WL SX | Hamblin X | 4. 6 | 4. 2 5. 0 | 13. 4 | 9. 5 17. 3 |
| 183 | Sierra Farms Hatchery Riverside, California | CG x WL BX | Silver Gray | 4. 5 | 4. 1 4. 9 | 11. 1 | 7. 2 15. 0 |
| 184 | Spruce Poultry Breeding Farm Bound Brook, New Jersey | WL SX | S-3 | 4. 5 | 4. 1 4. 9 | 12. 0 | 8. 1 15. 9 |
| 187 | Stever Hatchery Huntingdon, Pennsylvania | WL SX | 300 A | 4. 5 | 4. 1 4. 9 | 10. 6 | 6. 7 14. 5 |

\* If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

# All Stocks Entered, with Regressed Means and LSD Range for each Trait, (Cont'd.)

| AGE AT 50% PRODUCTION (Days) | | EGG PRODUCTION | | | | INCOME OVER FEED AND CHICK COST ($) | | FEED PER 24 OZ. OF EGGS PRODUCED (lbs) | | EGG WEIGHT (oz) | | BODY WEIGHT (lbs) | | STOCK CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | HEN HOUSED (No.) | | HEN DAY (%) | | | | | | | | | | |
| REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE | |
| 168 | 162 174 | 238.4 | 255.1 221.7 | 74.0 | 77.7 70.3 | 2.23 | 2.54 1.92 | 4.46 | 4.17 4.75 | 23.6 | 24.1 23.1 | 5.3 | 5.0 5.6 | 164 |
| 171 | 165 177 | 225.5 | 242.2 208.8 | 71.6 | 75.3 67.9 | 2.21 | 2.52 1.90 | 4.39 | 4.10 4.68 | 24.7 | 25.2 24.2 | 4.8 | 4.5 5.1 | 165 |
| 175 | 169 181 | 215.4 | 232.1 198.7 | 67.5 | 71.2 63.8 | 2.09 | 2.40 1.78 | 4.42 | 4.13 4.71 | 23.5 | 24.0 23.0 | 4.5 | 4.2 4.8 | 170 |
| 171 | 165 177 | 211.2 | 227.9 194.5 | 66.7 | 70.4 63.0 | 2.20 | 2.51 1.89 | 4.28 | 3.99 4.57 | 23.5 | 24.0 23.0 | 4.6 | 4.3 4.9 | 171 |
| 170 | 164 176 | 220.7 | 237.4 204.0 | 67.8 | 71.5 64.1 | 2.33 | 2.64 2.02 | 4.30 | 4.01 4.59 | 24.7 | 25.2 24.2 | 4.3 | 4.0 4.6 | 173 |
| 173 | 167 179 | 230.6 | 247.3 213.9 | 71.9 | 75.6 68.2 | 2.51 | 2.82 2.20 | 4.17 | 3.88 4.46 | 24.6 | 25.1 24.1 | 4.3 | 4.0 4.6 | 175 |
| 176 | 170 182 | 217.8 | 234.5 201.1 | 68.2 | 71.9 64.5 | 2.25 | 2.56 1.94 | 4.40 | 4.11 4.69 | 24.4 | 24.9 23.9 | 4.3 | 4.0 4.6 | 176 |
| 173 | 167 179 | 221.8 | 238.5 205.1 | 69.7 | 73.4 66.0 | 2.15 | 2.46 1.84 | 4.44 | 4.15 4.73 | 24.4 | 24.9 23.9 | 4.4 | 4.1 4.7 | 177 |
| 171 | 165 177 | 218.7 | 235.4 202.0 | 69.5 | 73.2 65.8 | 2.18 | 2.49 1.87 | 4.45 | 4.16 4.74 | 24.3 | 24.8 23.8 | 5.0 | 4.7 5.3 | 178 |
| 175 | 169 181 | 208.6 | 225.3 191.9 | 68.8 | 72.5 65.1 | 2.16 | 2.47 1.85 | 4.50 | 4.21 4.79 | 24.6 | 25.1 24.1 | 4.6 | 4.3 4.9 | 179 |
| 176 | 170 182 | 234.0 | 250.7 217.3 | 73.5 | 77.2 69.8 | 2.51 | 2.82 2.20 | 4.25 | 3.96 4.54 | 24.2 | 24.7 23.7 | 4.1 | 3.8 4.4 | 180 |
| 173 | 167 179 | 235.7 | 252.4 219.0 | 73.9 | 77.6 70.2 | 2.41 | 2.72 2.10 | 4.31 | 4.02 4.60 | 25.0 | 25.5 24.5 | 4.6 | 4.3 4.9 | 181 |
| 173 | 167 179 | 216.8 | 233.5 200.1 | 69.9 | 73.6 66.2 | 2.28 | 2.59 1.97 | 4.32 | 4.03 4.61 | 24.5 | 25.0 24.0 | 4.2 | 3.9 4.5 | 182 |
| 168 | 162 174 | 232.7 | 249.4 216.0 | 71.8 | 75.5 68.1 | 2.34 | 2.65 2.03 | 4.38 | 4.09 4.67 | 24.9 | 25.4 24.4 | 5.2 | 4.9 5.5 | 183 |
| 181 | 175 187 | 223.0 | 239.7 206.3 | 71.3 | 75.0 67.6 | 2.31 | 2.62 2.00 | 4.42 | 4.13 4.71 | 24.4 | 24.9 23.9 | 4.5 | 4.2 4.8 | 184 |
| 175 | 169 181 | 221.0 | 237.7 204.3 | 69.1 | 72.8 65.4 | 2.40 | 2.71 2.09 | 4.24 | 3.95 4.53 | 24.0 | 24.5 23.5 | 4.1 | 3.8 4.4 | 187 |

\* If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

All Stocks Entered, with Regressed Means and LSD Range for each Trait, (Cont'd.)

| STOCK CODE | BREEDER'S NAME AND ADDRESS | BREEDING | STRAIN OR TRADENAME | MORTALITY | | | |
|---|---|---|---|---|---|---|---|
| | | | | GROWING (%) | | LAYING (%) | |
| | | | | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE |
| 188 | Stever Hatchery<br>Huntingdon, Pennsylvania | WL<br>SX | 300 B | 4.5 | 4.1<br>4.9 | 13.3 | 9.4<br>17.2 |
| 190 | Stone's Poultry Farm<br>Dinuba, California | WL<br>SX | H 56 | 4.5 | 4.1<br>4.9 | 11.1 | 7.2<br>15.0 |
| 192 | Stone Bros. Hatchery<br>Madelia, Minnesota | WL<br>SX | 128 | 4.4 | 4.0<br>4.8 | 13.0 | 9.1<br>16.9 |
| 194 | Struthoff, Bernard<br>Vincetown, New Jersey | WL<br>SX | Commercial | --- | ---<br>--- | 12.1 | 8.2<br>16.0 |
| 196 | Sunnyside Hatchery<br>Watertown, Wisconsin | CG x WL<br>BX | Wisco White | 4.6 | 4.2<br>5.0 | 13.3 | 9.4<br>17.2 |
| 197 | Swift & Co.<br>Chicago, Illinois | WL<br>SX | Ski-Hi 316 | 4.5 | 4.1<br>4.9 | 11.9 | 8.0<br>15.8 |
| 199 | Townline Poultry Farm<br>Zeeland, Michigan | WL<br>SX | SC-30 | 4.6 | 4.2<br>5.0 | 11.9 | 8.0<br>15.8 |
| 200 | Truway Farms<br>East Berlin, Pennsylvania | WL<br>PS | Truway | 4.7 | 4.3<br>5.1 | 13.9 | 10.0<br>17.8 |
| 201 | University of Missouri<br>Columbia, Missouri | WL<br>PS | Intra Flock | 4.5 | 4.1<br>4.9 | 12.1 | 8.2<br>16.0 |
| 202 | Vancrest Farms<br>Hyde Park, New York | BX | All Red | 4.7 | 4.3<br>5.1 | 13.6 | 9.7<br>17.5 |
| 203 | Vancrest Farms<br>Hyde Park, New York | WL<br>SX | Regular Mating | 4.4 | 4.0<br>4.8 | 11.3 | 7.4<br>15.2 |
| 208 | Warren, J. J.<br>North Brookfield, Massachusetts | RIR x RIW<br>BX | Sex-Sal-Link | 4.9 | 4.5<br>5.3 | 13.6 | 9.7<br>17.5 |
| 209 | Weber Hatchery<br>Mohntown, Pennsylvania | WL<br>SX | Weber Cross | 4.6 | 4.2<br>5.0 | 12.9 | 9.0<br>16.8 |
| 210 | Webster Poultry Farms<br>Auburn, New York | RIR<br>PS | Certified | 4.9 | 4.5<br>5.3 | 16.7 | 12.8<br>20.6 |
| 211 | Welp's Breeding Farm<br>Bancroft, Iowa | INX | 341 | 4.6 | 4.2<br>5.0 | 10.0 | 6.1<br>13.9 |
| 212 | Welp's Breeding Farm<br>Bancroft, Iowa | WL<br>SX | 901 | 4.4 | 4.0<br>4.8 | 9.9 | 6.0<br>13.8 |

\* If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

All Stocks Entered, with Regressed Means and LSD Range for each Trait, (Cont'd.)

| AGE AT 50% PRODUCTION (Days) | | EGG PRODUCTION | | | | INCOME OVER FEED AND CHICK COST ($) | | FEED PER 24 OZ. OF EGGS PRODUCED (lbs) | | EGG WEIGHT (oz) | | BODY WEIGHT (lbs) | | STOCK CODE |
| | | HEN HOUSED (No.) | | HEN DAY (%) | | | | | | | | | | |
| REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 171 | 165 177 | 209.8 | 226.5 193.1 | 67.1 | 70.8 63.4 | 2.14 | 2.45 1.83 | 4.46 | 4.17 4.75 | 24.3 | 24.8 23.8 | 4.3 | 4.0 4.6 | 188 |
| 172 | 166 178 | 235.1 | 251.8 218.4 | 73.5 | 77.2 69.8 | 2.41 | 2.72 2.10 | 4.28 | 3.99 4.57 | 25.0 | 25.5 24.5 | 4.5 | 4.2 4.8 | 190 |
| 177 | 171 183 | 215.8 | 232.5 199.1 | 69.4 | 73.1 65.7 | 2.22 | 2.53 1.91 | 4.40 | 4.11 4.69 | 24.2 | 24.7 23.7 | 4.6 | 4.3 4.9 | 192 |
| 173 | 167 179 | 221.4 | 238.1 204.7 | 69.4 | 73.1 65.7 | 2.22 | 2.53 1.91 | 4.50 | 4.21 4.79 | 24.0 | 24.5 23.5 | 4.5 | 4.2 4.8 | 194 |
| 171 | 165 177 | 217.1 | 233.8 200.4 | 68.7 | 72.4 65.0 | 2.21 | 2.52 1.90 | 4.43 | 4.14 4.72 | 24.4 | 24.9 23.9 | 5.1 | 4.8 5.4 | 196 |
| 177 | 171 183 | 227.4 | 244.1 210.7 | 72.4 | 76.1 68.7 | 2.34 | 2.65 2.03 | 4.28 | 3.99 4.57 | 24.5 | 25.0 24.0 | 4.5 | 4.2 4.8 | 197 |
| 177 | 171 183 | 219.4 | 236.1 202.7 | 69.0 | 72.7 65.3 | 2.29 | 2.60 1.98 | 4.35 | 4.06 4.64 | 24.1 | 24.6 23.6 | 4.2 | 3.9 4.5 | 199 |
| 175 | 169 181 | 213.8 | 230.5 197.1 | 68.8 | 72.5 65.1 | 2.19 | 2.50 1.88 | 4.39 | 4.10 4.68 | 24.6 | 25.1 24.1 | 4.4 | 4.1 4.7 | 200 |
| 173 | 167 179 | 218.1 | 234.8 201.4 | 69.0 | 72.7 65.3 | 2.30 | 2.61 1.99 | 4.28 | 3.99 4.57 | 24.1 | 24.6 23.6 | 4.9 | 4.6 5.2 | 201 |
| 183 | 177 189 | 214.2 | 230.9 197.5 | 70.4 | 74.1 66.7 | 2.30 | 2.61 1.99 | 4.40 | 4.11 4.69 | 24.9 | 25.4 24.4 | 5.4 | 5.1 5.7 | 202 |
| 174 | 168 180 | 228.2 | 244.9 211.5 | 71.2 | 74.9 67.5 | 2.45 | 2.76 2.14 | 4.29 | 4.00 4.58 | 24.6 | 25.1 24.1 | 4.2 | 3.9 4.5 | 203 |
| 178 | 172 184 | 208.6 | 225.3 191.9 | 67.8 | 71.5 64.1 | 2.25 | 2.56 1.94 | 4.44 | 4.15 4.73 | 25.0 | 25.5 24.5 | 5.3 | 5.0 5.6 | 208 |
| 174 | 168 180 | 217.7 | 234.4 201.0 | 70.3 | 74.0 66.6 | 2.30 | 2.61 1.99 | 4.36 | 4.07 4.65 | 24.5 | 25.0 24.0 | 4.5 | 4.2 4.8 | 209 |
| 183 | 177 189 | 205.7 | 222.4 189.0 | 68.2 | 71.9 64.5 | 2.07 | 2.38 1.76 | 4.57 | 4.28 4.86 | 25.2 | 25.7 24.7 | 5.5 | 5.2 5.8 | 210 |
| 170 | 164 176 | 229.2 | 245.9 212.5 | 70.6 | 74.3 66.9 | 2.35 | 2.66 2.04 | 4.36 | 4.07 4.65 | 24.1 | 24.6 23.6 | 4.6 | 4.3 4.9 | 211 |
| 172 | 166 178 | 228.0 | 244.7 211.3 | 71.0 | 74.7 67.3 | ---- | ---- ---- | ---- | ---- ---- | 24.5 | 25.0 24.0 | 4.3 | 4.0 4.6 | 212 |

\* If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

| STOCK CODE | BREEDER'S NAME AND ADDRESS | BREEDING | | STRAIN OR TRADENAME | MORTALITY | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | GROWING (%) | | LAYING (%) | |
| | | | | | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE |
| 214 | Wheelock, Walter E. Chambersburg, Pennsylvania | WL | SX | Wheelock | 4.7 | 4.3 5.1 | 13.1 | 9.2 17.0 |
| 216 | Willow Dale Poultry Farm Holland, New York | WL | PS | Commercial | 4.5 | 4.1 4.9 | 12.6 | 8.7 16.5 |
| 217 | Wirtz Bros. Leghorn Farm Lebanon, New Jersey | WL | LX | Linecross | 4.5 | 4.1 4.9 | 13.4 | 9.5 17.3 |
| 218 | Wirtz Bros. Leghorn Farm Lebanon, New Jersey | WL | SX | Commercial | 4.7 | 4.3 5.1 | 12.7 | 8.8 16.6 |
| 219 | Wood Poultry Breeding Farm Pomona, California | AW | BX | Commercial | 4.5 | 4.1 4.9 | 11.4 | 7.5 15.3 |

\* If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

| AGE AT 50% PRODUCTION (Days) | | EGG PRODUCTION | | | | INCOME OVER FEED AND CHICK COST ($) | | FEED PER 24 OZ. OF EGGS PRODUCED (lbs) | | EGG WEIGHT (oz) | | BODY WEIGHT (lbs) | | STOCK CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | HEN HOUSED (No.) | | HEN DAY (%) | | | | | | | | | | |
| RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | |
| 176 | 170 182 | 220.8 | 237.5 204.1 | 71.0 | 74.7 67.3 | 2.34 | 2.65 2.03 | 4.28 | 3.99 4.57 | 24.8 | 25.3 24.3 | 4.3 | 4.0 4.6 | 214 |
| 175 | 169 181 | 218.2 | 234.9 201.5 | 69.5 | 73.2 65.8 | 2.28 | 2.59 1.97 | 4.34 | 4.05 4.63 | 24.5 | 25.0 24.0 | 4.5 | 4.2 4.8 | 216 |
| 179 | 173 185 | 208.6 | 225.3 191.9 | 67.3 | 71.0 63.6 | 2.12 | 2.43 1.81 | 4.50 | 4.21 4.79 | 24.7 | 25.2 24.2 | 4.3 | 4.0 4.6 | 217 |
| 175 | 169 181 | 215.5 | 232.2 198.8 | 68.6 | 72.3 64.9 | 2.28 | 2.59 1.97 | 4.38 | 4.09 4.67 | 24.9 | 25.4 24.4 | 4.5 | 4.2 4.8 | 218 |
| 172 | 166 178 | 224.5 | 241.2 207.8 | 70.2 | 73.9 66.5 | 2.23 | 2.54 1.92 | 4.46 | 4.17 4.75 | 24.4 | 24.9 23.9 | 4.9 | 4.6 5.2 | 219 |

* If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

| STOCK CODE | STRAIN OR TRADENAME | ALBUMEN QUALITY (Haugh units) | | BLOOD SPOTS 1/8 INCH OR MORE (%) | | BLOOD SPOTS LESS THAN 1/8 INCH (%) | | MEAT SPOTS 1/8 INCH OR MORE (%) | | MEAT SPOTS LESS THAN 1/8 INCH (%) | | SHELL THICKNESS (1/1000 inch) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE |
| 1 | A & M One Grade | 83.4 | 86.4 / 80.4 | 3.2 | 2.0 / 4.4 | 4.0 | 2.7 / 5.3 | 0.3 | 0.0 / 4.5 | 2.0 | 0.0 / 6.4 | 0.141 | 0.144 / .138 |
| 2 | Allstate LX 300 | 81.6 | 84.6 / 78.6 | 2.3 | 1.1 / 3.5 | 4.2 | 2.9 / 5.5 | --- | --- / --- | --- | --- / --- | .141 | .144 / .138 |
| 3 | Allstate LX 330 | 83.2 | 86.2 / 80.2 | --- | --- / --- | --- | --- / --- | --- | --- / --- | --- | --- / --- | .140 | .143 / .137 |
| 4 | Ames 415 B | 74.3 | 77.3 / 71.3 | 1.9 | .7 / 3.1 | 2.8 | 1.5 / 4.1 | .3 | .0 / 4.5 | 1.7 | .0 / 6.1 | .140 | .143 / .137 |
| 5 | Ames 424 | 77.1 | 80.1 / 74.1 | 2.0 | .8 / 3.2 | 3.0 | 1.7 / 4.3 | 1.5 | .0 / 5.7 | 2.3 | .0 / 6.7 | .139 | .142 / .136 |
| 6 | Ames 434 | 72.0 | 75.0 / 69.0 | 1.7 | .5 / 2.9 | 3.5 | 2.2 / 4.8 | .9 | .0 / 5.1 | 2.2 | .0 / 6.6 | .138 | .141 / .135 |
| 7 | Ames 434 R | 74.1 | 77.1 / 71.1 | 3.2 | 2.0 / 4.4 | 3.3 | 2.0 / 4.6 | 1.5 | .0 / 5.7 | 1.8 | .0 / 6.2 | .138 | .141 / .135 |
| 8 | Ames 505 | 79.2 | 82.2 / 76.2 | 1.8 | .6 / 3.0 | 5.6 | 4.3 / 6.9 | 9.8 | 5.6 / 14.0 | 30.2 | 25.8 / 34.6 | .142 | .145 / .139 |
| 10 | Anthony WL | 83.5 | 86.5 / 80.5 | 2.3 | 1.1 / 3.5 | 3.1 | 1.8 / 4.4 | 1.8 | .0 / 6.0 | 2.5 | .0 / 6.9 | .138 | .141 / .135 |
| 138 | Arbor Acres Mt. Hope Queen | 83.9 | 86.9 / 80.9 | 2.2 | 1.0 / 3.4 | 4.3 | 3.0 / 5.6 | .3 | .0 / 4.5 | 1.6 | .0 / 6.0 | .141 | .144 / .138 |
| 11 | Avery WR x RIR | 80.1 | 83.1 / 77.1 | 2.0 | .8 / 3.2 | 4.1 | 2.8 / 5.4 | 3.5 | .0 / 7.7 | 14.9 | 10.5 / 19.3 | .141 | .144 / .138 |
| 12 | Babcock Barbara Ann | 82.0 | 85.0 / 79.0 | 2.8 | 1.6 / 4.0 | 4.0 | 2.7 / 5.3 | 1.5 | .0 / 5.7 | 1.8 | .0 / 6.2 | .141 | .144 / .138 |
| 13 | Babcock Bessie | 82.3 | 85.3 / 79.3 | 2.5 | 1.3 / 3.7 | 3.4 | 2.1 / 4.7 | .5 | .0 / 4.7 | 2.1 | .0 / 6.5 | .142 | .145 / .139 |
| 15 | Bagby One Grade | 83.5 | 86.5 / 80.5 | 2.2 | 1.0 / 3.4 | 4.1 | 2.8 / 5.4 | 1.5 | .0 / 5.7 | 1.8 | .0 / 6.2 | .140 | .143 / .137 |
| 16 | Bagby Production Red | 82.1 | 85.1 / 79.1 | 2.7 | 1.5 / 3.9 | 4.7 | 3.4 / 6.0 | 3.1 | .0 / 7.3 | 20.9 | 16.5 / 25.3 | .138 | .141 / .135 |
| 17 | Ball 551 | 82.1 | 85.1 / 79.1 | 2.2 | 1.0 / 3.4 | 4.2 | 2.9 / 5.5 | 1.8 | .0 / 6.0 | 2.8 | .0 / 7.2 | .141 | .144 / .138 |

\* If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

| STOCK CODE | STRAIN OR TRADENAME | ALBUMEN QUALITY (Haugh units) | | BLOOD SPOTS | | | | MEAT SPOTS | | | | SHELL THICKNESS (1/1000 inch) | |
| | | | | 1/8 INCH OR MORE (%) | | LESS THAN 1/8 INCH (%) | | 1/8 INCH OR MORE (%) | | LESS THAN 1/8 INCH (%) | | | |
| | | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18 | Ballew WL | 81.2 | 84.2 78.2 | 2.4 | 1.2 3.6 | 3.9 | 2.6 5.2 | 1.5 | 0.0 5.7 | 1.8 | 0.0 6.2 | 0.140 | 0.143 .137 |
| 20 | Beamsdale 66 | 83.9 | 86.9 80.9 | 2.3 | 1.1 3.5 | 4.4 | 3.1 5.7 | 1.1 | .0 5.3 | 2.0 | .0 6.4 | .139 | .142 .136 |
| 22 | Booth Line 351 | 84.3 | 87.3 81.3 | 1.9 | .7 3.1 | 3.8 | 2.5 5.1 | .8 | .0 5.0 | 1.2 | .0 5.6 | .141 | .144 .138 |
| 23 | Booth WL | 83.9 | 86.9 80.9 | 2.6 | 1.4 3.8 | 3.6 | 2.3 4.9 | 1.5 | .0 5.7 | 3.7 | .0 8.1 | .141 | .144 .138 |
| 24 | Brender 1234 | 80.8 | 83.8 77.8 | 1.4 | .2 2.6 | 3.3 | 2.0 4.6 | 1.8 | .0 6.0 | 2.5 | .0 6.9 | .141 | .144 .138 |
| 25 | Bulkley WL | 83.2 | 86.2 80.2 | 1.8 | .6 3.0 | 3.5 | 2.2 4.8 | --- | --- --- | --- | --- --- | .139 | .142 .136 |
| 26 | Bundesen Graycie | 79.8 | 82.8 76.8 | 1.7 | .5 2.9 | 3.4 | 2.1 4.7 | .1 | .0 4.3 | 1.5 | .0 5.9 | .138 | .141 .135 |
| 27 | Burr LC 89 | 81.8 | 84.8 78.8 | 3.2 | 2.0 4.4 | 4.6 | 3.3 5.9 | 2.2 | .0 6.4 | 2.6 | .0 7.0 | .136 | .139 .133 |
| 28 | Butler County Supreme Grade | 83.0 | 86.0 80.0 | 1.9 | .7 3.1 | 4.1 | 2.8 5.4 | 2.2 | .0 6.4 | 3.5 | .0 7.9 | .139 | .142 .136 |
| 29 | Cameron DMX | 82.4 | 85.4 79.4 | 3.1 | 1.9 4.3 | 3.7 | 2.4 5.0 | 2.2 | .0 6.4 | 3.4 | .0 7.8 | .140 | .143 .137 |
| 30 | Carey Nicks | 85.0 | 88.0 82.0 | 1.5 | .3 2.7 | 2.6 | 1.3 3.9 | .3 | .0 4.5 | 1.6 | .0 6.0 | .142 | .145 .139 |
| 31 | Cashman Hi-Cash | 80.4 | 83.4 77.4 | 3.2 | 2.0 4.4 | 4.7 | 3.4 6.0 | 1.7 | .0 5.9 | 2.5 | .0 6.9 | .139 | .142 .136 |
| 32 | Childers CG x WL | 79.8 | 82.8 76.8 | 1.9 | .7 3.1 | 3.5 | 2.2 4.8 | .3 | .0 4.5 | 1.5 | .0 5.9 | .138 | .141 .135 |
| 33 | Clark Nu-Line 308 | 83.0 | 86.0 80.0 | 1.9 | .7 3.1 | 3.3 | 2.0 4.6 | .6 | .0 4.8 | 4.0 | .0 8.4 | .141 | .144 .138 |
| 34 | Colonial Best Egg Grade | 84.6 | 87.6 81.6 | 2.3 | 1.1 3.5 | 3.3 | 2.0 4.6 | 2.1 | .0 6.3 | 1.8 | .0 6.2 | .141 | .144 .138 |
| 35 | Colonial Trueline 365 | 82.9 | 85.9 79.9 | 2.5 | 1.3 3.7 | 4.5 | 3.2 5.8 | .3 | .0 4.5 | 1.4 | .0 5.8 | .141 | .144 .138 |

\* If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

All Stocks Entered, with Regressed Means and LSD Range for each Trait, (Cont'd.)

| STOCK CODE | STRAIN OR TRADENAME | ALBUMEN QUALITY (Haugh units) | | BLOOD SPOTS | | | | MEAT SPOTS | | | | SHELL THICKNESS (1/1000 inch) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 1/8 INCH OR MORE (%) | | LESS THAN 1/8 INCH (%) | | 1/8 INCH OR MORE (%) | | LESS THAN 1/8 INCH (%) | | | |
| | | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE |
| 213 | Colonial Westline 702 | 81.1 | 84.1 78.1 | 2.6 | 1.4 3.8 | 3.4 | 2.1 4.7 | 2.4 | 0.0 6.8 | 4.7 | 0.3 9.1 | 0.143 | 0.146 .140 |
| 37 | Cornell Random Bred | 80.8 | 83.8 77.8 | 3.0 | 1.8 4.2 | 4.3 | 3.0 5.6 | .5 | .0 4.7 | 2.0 | .0 6.4 | .139 | .142 .136 |
| 42 | Darby DX | 82.4 | 85.4 79.4 | 2.8 | 1.6 4.0 | 4.1 | 2.8 5.4 | 1.4 | .0 5.6 | 1.7 | .0 6.1 | .142 | .145 .139 |
| 43 | Darby Pure WL | 81.1 | 84.1 78.1 | 2.1 | .9 3.3 | 3.4 | 2.1 4.7 | 1.5 | .0 5.7 | 2.4 | .0 6.8 | .141 | .144 .138 |
| 45 | DeKalb 101 | 82.8 | 85.8 79.8 | 1.1 | .0 2.3 | 2.9 | 1.6 4.2 | .8 | .0 5.0 | 2.2 | .0 6.6 | .141 | .144 .138 |
| 46 | DeKalb 111 | 82.4 | 85.4 79.4 | 2.0 | .8 3.2 | 3.2 | 1.9 4.5 | 2.8 | .0 7.0 | 4.9 | .5 9.3 | .141 | .144 .138 |
| 47 | DeKalb 121 | 81.6 | 84.6 78.6 | 3.7 | 2.5 4.9 | 3.5 | 2.2 4.8 | 2.6 | .0 6.8 | 2.5 | .0 6.9 | .140 | .143 .137 |
| 48 | DeKalb 131 | 82.7 | 85.7 79.7 | 2.1 | .9 3.3 | 3.4 | 2.1 4.7 | 1.5 | .0 5.7 | 2.5 | .0 6.9 | .140 | .143 .137 |
| 49 | Del Rio RIR-A | 80.1 | 83.1 77.1 | 2.4 | 1.2 3.6 | 3.2 | 1.9 4.5 | 6.3 | 2.1 10.5 | 25.0 | 20.6 29.4 | .138 | .141 .135 |
| 50 | Del Rio RIR-B | 82.3 | 85.3 79.3 | 1.8 | .6 3.0 | 3.7 | 2.4 5.0 | 1.6 | .0 5.8 | 28.2 | 23.8 32.6 | .139 | .142 .136 |
| 51 | Demler One Grade | 83.0 | 86.0 80.0 | 2.3 | 1.1 3.5 | 3.3 | 2.0 4.6 | 6.1 | .0 4.3 | 1.6 | .0 6.0 | .143 | .146 .140 |
| 52 | Demler Kross | 79.8 | 82.8 76.8 | 2.3 | 1.1 3.5 | 3.5 | 2.2 4.8 | .1 | .0 4.3 | 1.5 | .0 5.9 | .138 | .141 .135 |
| 224 | Dirkse Superior | 79.6 | 82.6 76.6 | 3.2 | 2.0 4.4 | 3.1 | 1.8 4.4 | .3 | .0 4.5 | 1.5 | .0 5.9 | .140 | .143 .137 |
| 53 | Douglaston Commercial | 82.4 | 85.4 79.4 | 1.9. | .7 3.1 | 3.2 | 1.9 4.5 | --- | --- --- | --- | --- --- | .136 | .139 .133 |
| 54 | Drake One Grade | 81.1 | 84.1 78.1 | 1.4 | .2 2.6 | 3.5 | 2.2 4.8 | --- | --- --- | --- | --- --- | .140 | .143 .137 |
| 55 | Eby Grade #1 | 82.4 | 85.4 79.4 | 2.7 | 1.5 3.9 | 2.9 | 1.6 4.2 | .8 | .0 5.0 | .9 | .0 5.3 | .141 | .144 .138 |

* If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

34

| STOCK CODE | STRAIN OR TRADENAME | ALBUMEN QUALITY (Haugh units) | | BLOOD SPOTS 1/8 INCH OR MORE (%) | | BLOOD SPOTS LESS THAN 1/8 INCH (%) | | MEAT SPOTS 1/8 INCH OR MORE (%) | | MEAT SPOTS LESS THAN 1/8 INCH (%) | | SHELL THICKNESS (1/1000 inch) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE |
| 57 | Edmonds X Cross 103 | 79.8 | 82.8 76.8 | --- | --- --- | --- | --- --- | --- | --- --- | --- | --- --- | 0.140 | 0.143 .137 |
| 58 | Eelman WL | 83.4 | 86.4 80.4 | 1.8 | .6 3.0 | 4.5 | 3.2 5.8 | --- | --- --- | --- | --- --- | .137 | .140 .134 |
| 59 | Erath Str. X | ---- | ---- ---- | 2.2 | 1.0 3.4 | 3.8 | 2.5 5.1 | 2.6 | .0 6.8 | 2.4 | .0 6.8 | ---- | ---- ---- |
| 60 | Fletcher FX 100 | 82.3 | 85.3 79.3 | 2.2 | 1.0 3.4 | 4.0 | 2.7 5.3 | .5 | .0 4.7 | 1.0 | .0 5.4 | .144 | .147 .141 |
| 61 | Ford V 88 | 79.8 | 82.8 76.8 | 2.7 | 1.5 3.9 | 4.9 | 3.6 6.2 | 2.2 | .0 6.4 | 3.2 | .0 7.6 | .141 | .144 .138 |
| 62 | Forsgate WL | 85.0 | 88.0 82.0 | 3.5 | 2.3 4.7 | 3.9 | 2.6 5.2 | --- | --- --- | --- | --- --- | .138 | .141 .135 |
| 63 | Fox-Den Black Diamond | 80.7 | 83.7 77.7 | 2.5 | 1.3 3.7 | 3.7 | 2.4 5.0 | 11.7 | 7.5 15.9 | 25.5 | 21.1 29.9 | .137 | .140 .134 |
| 65 | Garber CG x WL | 80.6 | 83.6 77.6 | 1.5 | .3 2.7 | 3.5 | 2.2 4.8 | .3 | .0 4.5 | 1.5 | .0 5.9 | .139 | .142 .136 |
| 66 | Garber G-200 | 85.1 | 88.1 82.1 | 1.2 | .0 2.4 | 2.6 | 1.3 3.9 | .1 | .0 4.3 | 1.5 | .0 5.9 | .140 | .143 .137 |
| 67 | Garber G-300 C | 83.4 | 86.4 80.4 | 2.1 | .9 3.3 | 3.6 | 2.3 4.9 | 2.2 | .0 6.4 | 2.6 | .0 7.0 | .140 | .143 .137 |
| 69 | Garrison Golden Sex-Link | 82.6 | 85.6 79.6 | 2.6 | 1.4 3.8 | 4.9 | 3.6 6.2 | 2.7 | .0 6.9 | 9.3 | 4.9 13.7 | .140 | .143 .137 |
| 70 | Gasson G-33 | 82.6 | 85.6 79.6 | 2.3 | 1.1 3.5 | 3.3 | 2.0 4.6 | .5 | .0 4.7 | 1.8 | .0 6.2 | .142 | .145 .139 |
| 72 | Ghostley Pearl | 83.5 | 86.5 80.5 | 2.2 | 1.0 3.4 | 4.0 | 2.7 5.3 | .3 | .0 4.5 | 1.2 | .0 5.6 | .141 | .144 .138 |
| 74 | Graybill WL | 82.4 | 85.4 79.4 | 2.5 | 1.3 3.7 | 3.3 | 2.0 4.6 | 2.9 | .0 7.1 | 2.6 | .0 7.0 | .140 | .143 .137 |
| 75 | Great Plains Egg Master | 82.6 | 85.6 79.6 | 2.1 | .9 3.3 | 4.5 | 3.2 5.8 | 5.5 | 1.3 9.7 | 25.7 | 21.3 30.1 | .137 | .140 .134 |
| 76 | Great Plains Golden Cross | 82.1 | 85.1 79.1 | 2.6 | 1.4 3.8 | 4.6 | 3.3 5.9 | 5.8 | 1.6 10.0 | 7.5 | 3.1 11.9 | .139 | .142 .136 |

| STOCK CODE | STRAIN OR TRADENAME | ALBUMEN QUALITY (Haugh units) RE-GRESSED MEAN | LSD* RANGE | BLOOD SPOTS 1/8 INCH OR MORE (%) RE-GRESSED MEAN | LSD* RANGE | BLOOD SPOTS LESS THAN 1/8 INCH (%) RE-GRESSED MEAN | LSD* RANGE | MEAT SPOTS 1/8 INCH OR MORE (%) RE-GRESSED MEAN | LSD* RANGE | MEAT SPOTS LESS THAN 1/8 INCH (%) RE-GRESSED MEAN | LSD* RANGE | SHELL THICKNESS (1/1000 inch) RE-GRESSED MEAN | LSD* RANGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 78 | Hall Bros. Commercial | 81. 7 | 84. 7 78. 7 | 2. 3 | 1. 1 3. 5 | 3. 9 | 2. 6 5. 2 | 2. 2 | 0. 0 6. 4 | 2. 6 | 0. 0 7. 0 | 0. 141 | 0. 144 . 138 |
| 79 | Hall Bros. Silver Hallcross | 81. 4 | 84. 4 78. 4 | 1. 6 | . 4 2. 8 | 3. 4 | 2. 1 4. 7 | --- | --- --- | --- | --- --- | . 141 | . 144 . 138 |
| 80 | Hansen (Wash. ) Criss Cross H-25 | 82. 0 | 85. 0 79. 0 | 2. 5 | 1. 3 3. 7 | 4. 1 | 2. 8 5. 4 | 2. 1 | . 0 6. 3 | 2. 8 | . 0 7. 2 | . 140 | . 143 . 137 |
| 82 | Hansen (Wash. ) Criss Cross 61 | 82. 2 | 85. 2 79. 2 | 3. 1 | 1. 9 4. 3 | 4. 3 | 3. 0 5. 6 | . 0 | . 0 4. 2 | 1. 3 | . 0 5. 7 | . 139 | . 142 . 136 |
| 83 | Hansen (Calif. ) One Grade | 78. 7 | 81. 7 75. 7 | 1. 2 | . 0 2. 4 | 2. 1 | . 8 3. 4 | 2. 6 | . 0 6. 8 | 6. 3 | 1. 9 10. 7 | . 141 | . 144 . 138 |
| 84 | Hanson Super Nick | 81. 7 | 84. 7 78. 7 | 2. 1 | . 9 3. 3 | 3. 4 | 2. 1 4. 7 | . 3 | . 0 4. 5 | 1. 7 | . 0 6. 1 | . 139 | . 142 . 136 |
| 85 | Harco Flock Mating | 82. 6 | 85. 6 79. 6 | 1. 2 | . 0 2. 4 | 4. 4 | 3. 1 5. 7 | 8. 7 | 4. 5 12. 9 | 22. 0 | 17. 6 26. 4 | . 134 | . 137 . 131 |
| 225 | Harco Sex Link | ---- | ---- ---- | --- | --- --- | --- | --- --- | --- | --- --- | --- | --- --- | ---- | ---- ---- |
| 86 | Hardy Sex Link | ---- | ---- ---- | --- | --- --- | --- | --- --- | --- | --- --- | --- | --- --- | ---- | ---- ---- |
| 87 | Harper Huskie | 81. 0 | 84. 0 78. 0 | 3. 3 | 2. 1 4. 5 | 3. 0 | 1. 7 4. 3 | --- | --- --- | --- | --- --- | . 143 | . 146 . 140 |
| 88 | H & N Nick Chick | 84. 5 | 87. 5 81. 5 | 2. 0 | . 8 3. 2 | 2. 9 | 1. 6 4. 2 | . 3 | . 0 4. 5 | 1. 0 | . 0 5. 4 | . 139 | . 142 . 136 |
| 89 | H & N CG x WL | 79. 2 | 82. 2 76. 2 | 2. 3 | 1. 1 3. 5 | 3. 0 | 1. 7 4. 3 | . 1 | . 0 4. 3 | 2. 0 | . 0 6. 4 | . 137 | . 140 . 134 |
| 90 | Hobart WL | 81. 7 | 84. 7 78. 7 | 2. 1 | . 9 3. 3 | 3. 7 | 2. 4 5. 0 | --- | --- --- | --- | --- --- | . 141 | . 144 . 138 |
| 92 | Honegger Layer | 82. 6 | 85. 6 79. 6 | 1. 7 | . 5 2. 9 | 3. 5 | 2. 2 4. 8 | . 5 | . 0 4. 7 | 1. 4 | . 0 5. 8 | . 143 | . 146 . 140 |
| 93 | Honegger Layer #62 | 83. 6 | 86. 6 80. 6 | 1. 9 | . 7 3. 1 | 4. 0 | 2. 7 5. 3 | 1. 5 | . 0 5. 7 | 2. 4 | . 0 6. 8 | . 139 | . 142 . 136 |
| 95 | Hubbard H496 | 82. 5 | 85. 5 79. 5 | . 9 | . 0 2. 1 | 2. 7 | 1. 4 4. 0 | 16. 5 | 12. 3 20. 7 | 23. 9 | 19. 5 28. 3 | . 135 | . 138 . 132 |

\* If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

| STOCK CODE | STRAIN OR TRADENAME | ALBUMEN QUALITY (Haugh units) | | BLOOD SPOTS 1/8 INCH OR MORE (%) | | LESS THAN 1/8 INCH (%) | | MEAT SPOTS 1/8 INCH OR MORE (%) | | LESS THAN 1/8 INCH (%) | | SHELL THICKNESS (1/1000 inch) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE |
| 97 | Hy-Line 934 A | 78.1 | 81.1 75.1 | 1.7 | .5 2.9 | 2.6 | 1.3 3.9 | 0.1 | 0.0 4.3 | 0.5 | 0.0 4.9 | 0.141 | 0.144 .138 |
| 99 | Hy-Line 934 C | 77.2 | 80.2 74.2 | 1.8 | .6 3.0 | 2.4 | 1.1 3.7 | .1 | .0 4.3 | .1 | .0 4.5 | .140 | .143 .137 |
| 101 | Ideal H-3-W | 80.6 | 83.6 77.6 | 2.6 | 1.4 3.8 | 3.8 | 2.5 5.1 | .2 | .0 4.4 | 1.4 | .0 5.8 | .141 | .144 .138 |
| 102 | Indian Head WL | 82.7 | 85.7 79.7 | 2.9 | 1.7 4.1 | 3.1 | 1.8 4.4 | --- | --- --- | --- | --- --- | .141 | .144 .138 |
| 103 | Ind. F. B. Coop. 10-33 | 82.1 | 85.1 79.1 | 2.1 | .9 3.3 | 4.1 | 2.8 5.4 | 1.8 | .0 6.0 | 2.1 | .0 6.5 | .140 | .143 .137 |
| 104 | Ind. F. B. Coop. 10-42 | 81.6 | 84.6 78.6 | 2.2 | 1.0 3.4 | 3.5 | 2.2 4.8 | 1.5 | .0 5.7 | 1.8 | .0 6.2 | .142 | .145 .139 |
| 106 | Jacobs Commercial | 82.1 | 85.1 79.1 | 2.2 | 1.0 3.4 | 4.9 | 3.6 6.2 | --- | --- --- | --- | --- --- | .140 | .143 .137 |
| 107 | Kahn Commercial | 81.0 | 84.0 78.0 | 2.5 | 1.3 3.7 | 4.3 | 3.0 5.6 | --- | --- --- | --- | --- --- | .141 | .144 .138 |
| 108 | Kerr 409 C | 81.9 | 84.9 78.9 | --- | --- --- | --- | --- --- | --- | --- --- | --- | --- --- | .143 | .146 .140 |
| 109 | Keystone Leghorns | 81.6 | 84.6 78.6 | 2.1 | .9 3.3 | 3.2 | 1.9 4.5 | 3.1 | .0 7.3 | 2.6 | .0 7.0 | .140 | .143 .137 |
| 110 | Kimber K-137 | 83.8 | 86.8 80.8 | 2.7 | 1.5 3,9 | 3.8 | 2.5 5.1 | .7 | .0 4.9 | 1.5 | .0 5.9 | .144 | .147 .141 |
| 112 | Kimber K-155 | 83.5 | 86.5 80.5 | 2.5 | 1.3 3.7 | 3.6 | 2.3 4.9 | .8 | .0 5.0 | 1.8 | .0 6.2 | .141 | .144 .138 |
| 113 | Kruger Commercial | 79.6 | 82.6 76.6 | 3.6 | 2.4 4.8 | 4.3 | 3.0 5.6 | .3 | .0 4.5 | 1.7 | .0 6.1 | .137 | .140 .134 |
| 114 | Lakewood Commercial | 83.1 | 86.1 80.1 | 1.7 | .5 2.9 | 3.2 | 1.9 4.5 | --- | --- --- | --- | --- --- | .142 | .145 .139 |
| 115 | Lasher Commercial | 81.3 | 84.3 78.3 | 2.2 | 1.0 3.4 | 3.3 | 2.0 4.6 | .1 | .0 4.3 | 1.5 | .0 5.9 | .141 | .144 .138 |
| 116 | Lawton Certified Cand. | 83.3 | 86.3 80.3 | 1.8 | .6 3.0 | 3.1 | 1.8 4.4 | --- | --- --- | --- | --- --- | .138 | .141 .135 |

\* If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

| STOCK CODE | STRAIN OR TRADENAME | ALBUMEN QUALITY (Haugh units) | | BLOOD SPOTS 1/8 INCH OR MORE (%) | | BLOOD SPOTS LESS THAN 1/8 INCH (%) | | MEAT SPOTS 1/8 INCH OR MORE (%) | | MEAT SPOTS LESS THAN 1/8 INCH (%) | | SHELL THICKNESS (1/1000 inch) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE |
| 117 | Lawton Buff Sex Link | ---- | ---- ---- | --- | --- --- | --- | --- --- | --- | --- --- | --- | --- --- | ---- | ---- ---- |
| 118 | Leader 10-X | 83.3 | 86.3 80.3 | 2.0 | 0.8 3.2 | 3.5 | 2.2 4.8 | 2.9 | 0.0 7.1 | 2.6 | 0.0 7.0 | 0.141 | 0.144 .138 |
| 248 | Lee WR | 81.2 | 84.2 78.2 | 1.8 | .6 3.0 | 5.2 | 3.9 6.5 | 4.3 | .1 8.5 | 17.2 | 12.8 21.6 | .140 | .143 .137 |
| 121 | Leonard Lanco 505 | 83.8 | 86.8 80.8 | 2.7 | 1.5 3.9 | 3.9 | 2.6 5.2 | 1.5 | .0 5.7 | 2.6 | .0 7.0 | .138 | .141 .135 |
| 122 | Liechty L-240 | 82.9 | 85.9 79.9 | 1.9 | .7 3.1 | 3.7 | 2.4 5.0 | 1.5 | .0 5.7 | 2.4 | .0 6.8 | .139 | .142 .136 |
| 124 | Lux H-D-6 | 81.5 | 84.5 78.5 | 2.9 | 1.7 4.1 | 4.6 | 3.3 5.9 | 1.8 | .0 6.0 | 4.1 | .0 8.5 | .141 | .144 .138 |
| 126 | Mathews M-138 | 82.7 | 85.7 79.7 | 2.9 | 1.7 4.1 | 3.3 | 2.0 4.6 | 1.7 | .0 5.9 | 5.9 | 1.5 10.3 | .140 | .143 .137 |
| 127 | McDonald, Ray WL | ---- | ---- ---- | 2.0 | .8 3.2 | 4.1 | 2.8 5.4 | .8 | .0 5.0 | .3 | .0 4.7 | ---- | ---- ---- |
| 128 | McDonald, Roy WL | ---- | ---- ---- | 2.5 | 1.3 3.7 | 4.1 | 2.8 5.4 | 1.7 | .0 5.9 | 1.7 | .0 6.1 | ---- | ---- ---- |
| 132 | Meadow View 3 way | 82.6 | 85.6 79.6 | 1.8 | .6 3.0 | 3.5 | 2.2 4.8 | 1.1 | .0 5.3 | 4.3 | .0 8.7 | .142 | .145 .139 |
| 133 | Merryknoll 400 | ---- | ---- ---- | --- | --- --- | --- | --- --- | --- | --- --- | --- | --- --- | ---- | ---- ---- |
| 134 | Midwest Best Egg Grade | 80.9 | 83.9 77.9 | 2.2 | 1.0 3.4 | 4.0 | 2.7 5.3 | 1.5 | .0 5.7 | 3.0 | .0 7.4 | .141 | .144 .138 |
| 135 | Midwest Production Red | 87.1 | 90.1 84.1 | 2.1 | .9 3.3 | 4.1 | 2.8 5.4 | 2.6 | .0 6.8 | 15.1 | 10.7 19.5 | .138 | .141 .135 |
| 136 | Missouri Valley Best Egg Contest | 84.0 | 87.0 81.0 | 2.2 | 1.0 3.4 | 4.0 | 2.7 5.3 | 1.5 | .0 5.7 | 2.4 | .0 6.8 | .140 | .143 .137 |
| 137 | Missouri Valley Ski Line Layers | 82.5 | 85.5 79.5 | 2.9 | 1.7 4.1 | 3.9 | 2.6 5.2 | 1.5 | .0 5.7 | 1.8 | .0 6.2 | .141 | .144 .138 |
| 139 | Niles WL | 82.7 | 85.7 79.7 | 2.5 | 1.3 3.7 | 4.4 | 3.1 5.7 | .4 | .0 4.6 | 1.6 | .0 6.0 | .141 | .144 .138 |

\* If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

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| STOCK CODE | STRAIN OR TRADENAME | ALBUMEN QUALITY (Haugh units) | | BLOOD SPOTS 1/8 INCH OR MORE (%) | | BLOOD SPOTS LESS THAN 1/8 INCH (%) | | MEAT SPOTS 1/8 INCH OR MORE (%) | | MEAT SPOTS LESS THAN 1/8 INCH (%) | | SHELL THICKNESS (1/1000 inch) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE |
| 140 | Niles Commercial | 77.3 | 80.3 74.3 | 1.5 | 0.3 2.7 | 3.0 | 1.7 4.3 | 0.1 | 0.0 4.3 | 1.5 | 0.0 5.9 | 0.138 | 0.141 .135 |
| 141 | Nimton WL | 81.4 | 84.4 78.4 | 1.2 | .0 2.4 | 3.0 | 1.7 4.3 | .5 | .0 4.7 | 1.5 | .0 5.9 | .138 | .141 .135 |
| 142 | Norco Grade A | 83.0 | 86.0 80.0 | 2.0 | .8 3.2 | 4.2 | 2.9 5.5 | .1 | .0 4.3 | 1.5 | .0 5.9 | .140 | .143 .137 |
| 143 | Norris Efficiency Leghorns | 83.8 | 86.8 80.8 | 2.2 | 1.0 3.4 | 3.0 | 1.7 4.3 | 2.7 | .0 6.9 | 2.6 | .0 7.0 | .140 | .143 .137 |
| 144 | Oster WL | 83.5 | 86.5 80.5 | 3.3 | 2.1 4.5 | 3.8 | 2.5 5.1 | --- | --- --- | --- | --- --- | .141 | .144 .138 |
| 145 | Ottawa Random Bred | 82.3 | 85.3 79.3 | 2.8 | 1.6 4.0 | 4.4 | 3.1 5.7 | --- | --- --- | --- | --- --- | .140 | .143 .137 |
| 148 | Parmelee Certified | 79.5 | 82.5 76.5 | 2.1 | .9 3.3 | 2.8 | 1.5 4.1 | --- | --- --- | --- | --- --- | .138 | .141 .135 |
| 149 | Parmenter Certified | 83.5 | 86.5 80.5 | 2.0 | .8 3.2 | 4.1 | 2.8 5.4 | 10.7 | 6.5 14.9 | 22.8 | 18.4 27.2 | .136 | .139 .133 |
| 151 | Peerless 262 | 82.1 | 85.1 79.1 | 2.6 | 1.4 3.8 | 3.5 | 2.2 4.8 | .4 | .0 4.6 | 1.6 | .0 6.0 | .141 | .144 .138 |
| 152 | Penna. F. B. LSC-55 | 85.3 | 88.3 82.3 | 2.3 | 1.1 3.5 | 3.7 | 2.4 5.0 | 2.2 | .0 6.4 | 3.3 | .0 7.7 | .141 | .144 .138 |
| 154 | Pillbury Maxi-Lay Queens | 83.7 | 86.7 80.7 | 2.1 | .9 3.3 | 3.8 | 2.5 5.1 | .5 | .0 4.7 | .5 | .0 4.9 | .141 | .144 .138 |
| 157 | Purdue Random Bred | 78.7 | 81.7 75.7 | 1.3 | .1 2.5 | 3.0 | 1.7 4.3 | 7.1 | 2.9 11.3 | 8.2 | 3.8 12.6 | .139 | .142 .136 |
| 158 | Randall WL | 82.8 | 85.8 79.8 | 3.4 | 2.2 4.6 | 4.8 | 3.5 6.1 | .1 | .0 4.3 | 1.5 | .0 5.9 | .142 | .145 .139 |
| 159 | Randall CG x WL | 80.4 | 83.4 77.4 | 2.0 | .8 3.2 | 4.2 | 2.9 5.5 | .1 | .0 4.3 | 1.5 | .0 5.9 | .138 | .141 .135 |
| 160 | Rapp Linecross | 81.9 | 84.9 78.9 | 2.6 | 1.4 3.8 | 4.7 | 3.4 6.0 | 1.5 | .0 5.7 | 2.5 | .0 6.9 | .140 | .143 .137 |
| 161 | Reid VH 354 | 81.9 | 84.9 78.9 | 2.4 | 1.2 3.6 | 3.9 | 2.6 5.2 | 1.2 | .0 5.4 | 5.0 | .6 9.4 | .138 | .141 .135 |

* If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

| STOCK CODE | STRAIN OR TRADENAME | ALBUMEN QUALITY (Haugh units) | | BLOOD SPOTS 1/8 INCH OR MORE (%) | | BLOOD SPOTS LESS THAN 1/8 INCH (%) | | MEAT SPOTS 1/8 INCH OR MORE (%) | | MEAT SPOTS LESS THAN 1/8 INCH (%) | | SHELL THICKNESS (1/1000 inch) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE | REGRESSED MEAN | LSD* RANGE |
| 164 | Richardson Commercial | 77.9 | 80.9 74.9 | 1.9 | 0.7 3.1 | 3.0 | 1.7 4.3 | 1.7 | 0.0 5.9 | 4.6 | 0.2 9.0 | 0.142 | 0.145 .139 |
| 165 | Richardson Commercial MWA | 77.7 | 80.7 74.7 | 1.3 | .1 2.5 | 2.8 | 1.5 4.1 | 2.4 | .0 6.6 | 3.7 | .0 8.1 | .143 | .146 .140 |
| 170 | Rucker GW 389A | 77.9 | 80.9 74.9 | 3.5 | 2.3 4.7 | 3.9 | 2.6 5.2 | 1.2 | .0 5.4 | 1.9 | .0 6.3 | .141 | .144 .138 |
| 171 | Rucker GW 389C | 78.1 | 81.1 75.1 | 3.3 | 2.1 4.5 | 3.5 | 2.2 4.8 | 1.5 | .0 5.7 | 2.5 | .0 6.9 | .141 | .144 .138 |
| 173 | Sand Hills Commercial | 80.9 | 83.9 77.9 | 2.8 | 1.6 4.0 | 3.7 | 2.4 5.0 | --- | --- --- | --- | --- --- | .140 | .143 .137 |
| 175 | Schaible Commercial | 84.6 | 87.6 81.6 | 2.6 | 1.4 3.8 | 3.9 | 2.6 5.2 | 1.8 | .0 6.0 | 2.1 | .0 6.5 | .142 | .145 .139 |
| 176 | Schaible Commercial 2 | 83.4 | 86.4 80.4 | 2.4 | 1.2 3.6 | 3.8 | 2.5 5.1 | 1.5 | .0 5.7 | 3.0 | .0 7.4 | .141 | .144 .138 |
| 177 | Schildemeyer Commercial WL | 80.6 | 83.6 77.6 | 3.3 | 2.1 4.5 | 3.8 | 2.5 5.1 | .1 | .0 4.3 | 1.5 | .0 5.9 | .139 | .142 .136 |
| 178 | Schildemeyer Commercial CGxWL | 78.7 | 81.7 75.7 | 1.9 | .7 3.1 | 3.8 | 2.5 5.1 | .1 | .0 4.3 | 1.5 | .0 5.9 | .139 | .142 .136 |
| 179 | Schubkegel M & S Cross | 83.5 | 86.5 80.5 | 1.4 | .2 2.6 | 2.9 | 1.6 4.2 | --- | --- --- | --- | --- --- | .138 | .141 .135 |
| 180 | Schuyler Egg Champs | 82.1 | 85.1 79.1 | 2.6 | 1.4 3.8 | 3.9 | 2.6 5.2 | 2.2 | .0 6.4 | 3.4 | .0 7.8 | .140 | .143 .137 |
| 181 | Shaver Starcross 288 | 82.0 | 85.0 79.0 | 1.6 | .4 2.8 | 3.9 | 2.6 5.2 | .6 | .0 4.8 | 1.9 | .0 6.3 | .142 | .145 .139 |
| 182 | Shenango Hamblin X | 81.3 | 84.3 78.3 | 1.9 | .7 3.1 | 3.4 | 2.1 4.7 | 2.2 | .0 6.4 | 3.3 | .0 7.7 | .141 | .144 .138 |
| 183 | Sierra Silver Gray | 78.7 | 81.7 75.7 | 2.3 | 1.1 3.5 | 2.9 | 1.6 4.2 | .3 | .0 4.5 | 1.5 | .0 5.9 | .138 | .141 .135 |
| 184 | Spruce S-3 | 82.7 | 85.7 79.7 | 2.6 | 1.4 3.8 | 3.5 | 2.2 4.8 | --- | --- --- | --- | --- --- | .139 | .142 .136 |
| 187 | Stever 300A | 80.8 | 83.8 77.8 | 2.9 | 1.7 4.1 | 3.4 | 2.1 4.7 | .4 | .0 4.6 | 1.8 | .0 6.2 | .141 | .144 .138 |

\* If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

| STOCK CODE | STRAIN OR TRADENAME | ALBUMEN QUALITY (Haugh units) | | BLOOD SPOTS | | | | MEAT SPOTS | | | | SHELL THICKNESS (1/1000 inch) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 1/8 INCH OR MORE (%) | | LESS THAN 1/8 INCH (%) | | 1/8 INCH OR MORE (%) | | LESS THAN 1/8 INCH (%) | | | |
| | | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE |
| 188 | Stever 300-B | 82.0 | 85.0 / 79.0 | 2.4 | 1.2 / 3.6 | 3.6 | 2.3 / 4.9 | --- | --- / --- | --- | --- / --- | 0.141 | 0.144 / .138 |
| 190 | Stone (Calif.) H-56 | 81.9 | 84.9 / 78.9 | 1.3 | .1 / 2.5 | 2.8 | 1.5 / 4.1 | 0.3 | 0.0 / 4.5 | 1.5 | 0.0 / 5.9 | .141 | .144 / .138 |
| 192 | Stone (Minn.) 128 | 83.3 | 86.3 / 80.3 | --- | --- / --- | --- | --- / --- | --- | --- / --- | --- | --- / --- | .142 | .145 / .139 |
| 194 | Struthoff Commercial | 80.8 | 83.8 / 77.8 | 2.4 | 1.2 / 3.6 | 3.1 | 1.8 / 4.4 | --- | --- / --- | --- | --- / --- | .140 | .143 / .137 |
| 196 | Sunnyside Wisco White | 80.2 | 83.2 / 77.2 | 1.8 | .6 / 3.0 | 3.1 | 1.8 / 4.4 | 3.1 | .0 / 7.3 | 6.6 | 2.2 / 11.0 | .140 | .143 / .137 |
| 197 | Swift Ski Hi 316 | 82.4 | 85.4 / 79.4 | 2.5 | 1.3 / 3.7 | 3.5 | 2.2 / 4.8 | 1.2 | .0 / 5.4 | 1.2 | .0 / 5.6 | .143 | .146 / .140 |
| 199 | Townline SC 30 | 81.6 | 84.6 / 78.6 | 2.0 | .8 / 3.2 | 4.6 | 3.3 / 5.9 | 1.8 | .0 / 6.0 | 2.5 | .0 / 6.9 | .140 | .143 / .137 |
| 200 | Truway WL | 83.9 | 86.9 / 80.9 | 2.1 | .9 / 3.3 | 3.4 | 2.1 / 4.7 | 2.2 | .0 / 6.4 | 2.6 | .0 / 7.0 | .139 | .142 / .136 |
| 201 | Univ. of Missouri Intra Flock | 84.3 | 87.3 / 81.3 | 2.4 | 1.2 / 3.6 | 3.1 | 1.8 / 4.4 | 1.5 | .0 / 5.7 | 1.8 | .0 / 6.2 | .141 | .144 / .138 |
| 202 | Vancrest All Red | 85.4 | 88.4 / 82.4 | 1.4 | .2 / 2.6 | 3.4 | 2.1 / 4.7 | --- | --- / --- | --- | --- / --- | .138 | .141 / .135 |
| 203 | Vancrest Reg. Mating WL | 81.2 | 84.2 / 78.2 | 2.3 | 1.1 / 3.5 | 3.6 | 2.3 / 4.9 | --- | --- / --- | --- | --- / --- | .141 | .144 / .138 |
| 208 | Warren Sex-Sal-Link | 81.5 | 84.5 / 78.5 | 1.0 | .0 / 2.2 | 3.2 | 1.9 / 4.5 | 12.3 | 8.1 / 16.5 | 18.1 | 13.7 / 22.5 | .137 | .140 / .134 |
| 209 | Weber Cross | 81.2 | 84.2 / 78.2 | 2.4 | 1.2 / 3.6 | 3.1 | 1.8 / 4.4 | 2.2 | .0 / 6.4 | 3.9 | .0 / 8.3 | .140 | .143 / .137 |
| 210 | Webster Certified | 83.2 | 86.2 / 80.2 | 1.6 | .4 / 2.8 | 3.2 | 1.9 / 4.5 | --- | --- / --- | --- | --- / --- | .134 | .137 / .131 |
| 211 | Welp 341 | 78.7 | 81.7 / 75.7 | 2.7 | 1.5 / 3.9 | 4.2 | 2.9 / 5.5 | .1 | .0 / 4.3 | 1.5 | .0 / 5.9 | .141 | .144 / .138 |
| 212 | Welp 901 | 79.7 | 82.7 / 76.7 | --- | --- / --- | --- | --- / --- | --- | --- / --- | --- | --- / --- | .138 | .141 / .135 |

\* If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

| STOCK CODE | STRAIN OR TRADENAME | ALBUMEN QUALITY (Haugh units) | | BLOOD SPOTS 1/8 INCH OR MORE (%) | | BLOOD SPOTS LESS THAN 1/8 INCH (%) | | MEAT SPOTS 1/8 INCH OR MORE (%) | | MEAT SPOTS LESS THAN 1/8 INCH (%) | | SHELL THICKNESS (1/1000 inch) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE | RE-GRESSED MEAN | LSD* RANGE |
| 214 | Wheelock WL | 83.1 | 86.1 80.1 | 1.9 | 0.7 3.1 | 3.7 | 2.4 5.0 | 2.2 | 0.0 6.4 | 2.6 | 0.0 7.0 | 0.141 | 0.144 .138 |
| 216 | Willow Dale Commercial | 81.3 | 84.3 78.3 | 3.1 | 1.9 4.3 | 4.3 | 3.0 5.6 | --- | --- --- | --- | --- --- | .138 | .141 .135 |
| 217 | Wirtz Linecross | 83.5 | 86.5 80.5 | 2.6 | 1.4 3.8 | 3.0 | 1.7 4.3 | 3.5 | .0 7.7 | 4.1 | .0 3.5 | .143 | .146 .140 |
| 218 | Wirtz Commercial | 81.6 | 84.6 78.6 | 3.5 | 2.3 4.7 | 4.1 | 2.8 5.4 | --- | --- --- | --- | --- --- | .141 | .144 .138 |
| 219 | Wood Commercial | 81.1 | 84.1 78.1 | 1.0 | .0 2.2 | 2.3 | 1.0 3.6 | 3.2 | .0 7.4 | 5.6 | 1.2 10.0 | .140 | .143 .137 |

* If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

## Stocks Entered in 1959-60 Random Sample Egg Production Tests
(Listed alphabetically and showing tests entered)

| Stock Code | Breeder | Breeding | Stock | No. Entries | Ariz. | Calif. | Fla. | Inter. Mt. | Iowa | Minn. | Mo. | N. H. | N. J. | C. N. Y. | W. N. Y. | N. C. | Penna. | Texas | Wisc. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | A & M | WL PS | One Grade | 1 | | X | | | | | | | | | | | | | |
| 2 | Allstate | WL SX | LX 300 | 1 | | | | | | | | | | | X | | | | |
| 3 | Allstate | WL SX | LX 330 | 1 | | | | | | X | | | | | | | | | |
| 4 | Ames | INX | 415B | | | X | | | | | | | | | | | X | | |
| 5 | Ames | INX | 424 | 3 | | | X | | | | | | | | | | | X | |
| 6 | Ames | INX | 434 | 3 | | | | | X | | | | | X | | | | X | |
| 7 | Ames | INX | 434R | 3 | | | | | | | X | | X | X | | | X | | |
| 8 | Ames | INX | 505 | 2 | | | | | | X | X | X | | X | | X | X | | |
| 10 | Anthony | WL SX | Anthony | 3 | | X | X | X | | | | | | | | | | | |
| 138 | Arbor Acres | WL SX | Mt. Hope Queen | 10 | | | X | | X | X | X | X | | X | X | X | X | | |
| 11 | Avery | WR x RIR BX | Avery | 2 | | | | | | | | X | | | | | X | | |
| 12 | Babcock | WL SX | Barbara Ann | 1 | | X | | | | | | | | | | | | | |
| 13 | Babcock | WL SX | Bessie | 17 | | X | XXX | X | X | X | X | X | X | X | X | X | X | XX | X |
| 15 | Bagby | WL PS | One Grade | 1 | | | X | | | | X | | | | | | | | |
| 16 | Bagby | RIR PS | Prod. Red | 1 | | | | | | | X | | | | | | X | | |
| 17 | Ball | WL SX | 551 | 4 | | X | | | | | X | | | X | | | X | | |
| 18 | Ballew | WL SX | Ballew | 1 | | | | | | | X | | | | | | | | |
| 20 | Beamsdale | WL SX | Beamsdale 66 | 2 | | X | | | | | X | X | | | | | X | | |
| 22 | Booth | INX | Booth Line 351 | 4 | | | | X | | | | | | | | X | | | |
| 23 | Booth | WL PS | Booth | 1 | | X | | | | | | | | | | X | | | X |
| 24 | Brender | WL SX | 1234 | 6 | | | | | | | X | | | X | X | | X | | |
| 25 | Bulkley | WL SX | Bulkley | 1 | | X | | | | | | | | | | | | | |
| 26 | Bundesen | CG x WL BX | Graycie | 1 | | X | | | | | | | X | | | | | | |
| 27 | Burr | WL LX | LC 89 | 1 | | | | | | | X | | | | | | | | |
| 28 | Butler Co. | WL PS | Supreme Grade | 1 | | | | | | | X | X | | X | X | X | X | | |
| 29 | Cameron | WL SX | DMX | 1 | | X | | | | | | | | | | | | | |
| 30 | Carey | WL SX | Carey Nicks | 3 | | | | | | X | X | | | | X | | | | |
| 31 | Cashman | WL SX | Hi-Cash | 5 | | X | | | | | | | | | | X | | | X |
| 32 | Childers | CG x WL BX | Childers | 1 | | X | | | | | | | | | | | | | |
| 33 | Clark | WL SX | Nu-Line 308 | 1 | | | | | | | | | | | | | X | | X |
| 34 | Colonial | WL PS | Best Egg Grade | 1 | | | | | | | X | | X | | | | | | |
| 35 | Colonial | WL IN | True Line 365 | 13 | | X | X | | X | X | X | | | X | X | X | X | XX | X |
| 213 | Colonial | WL SX | Westline 702 | 1 | | X | X | | X | X | X | | | X | | X | X | X | X |
| 37 | Cornell | WL PS | Random Bred | 11 | | X | X | | X | X | X | | X | | X | X | X | | X |
| 42 | Darby | WL SX | Darby DX | 4 | | | X | X | | | X | | X | | | | X | | |
| 43 | Darby | WL PS | Darby | 2 | | X | X | X | | | X | | | | | | | | X |
| 45 | DeKalb | INX | 101 | 7 | | X | X | X | | | X | | | | | | X | XX | X |
| 46 | DeKalb | INX | 111 | 1 | | | | | | | X | | | | | | | | X |

| Stock Code | Breeder | Breeding | Stock | No. Entries | Ariz. | Calif. | Fla. | Inter. Mt. | Iowa | Minn. | Mo. | N. H. | N. J. | C. N. Y. | W. N. Y. | N. C. | Penna. | Texas | Wisc. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 47 | DeKalb | INX | 121 | 3 | | | X | | | | | | X | | | | X | | |
| 48 | DeKalb | INX | 131 | 7 | | | X | | X | X | X | | | X | | X | | X | |
| 49 | Del Rio | RIR PS | A | 1 | X | | | | | | | | | | | | | | |
| 50 | Del Rio | RIR PS | B | 1 | X | | | | | | | | | | | | | | |
| 51 | Demler | WL SX | One Grade | 2 | | X | | | | | | | | | | | | | |
| 52 | Demler | Syn x WL BX | Demler Kross | 1 | | X | | | | | | | | | | | | | |
| 224 | Dirkse | WL PS | Dirkse Superior | 1 | | X | | | | | | | | | X | | | | |
| 53 | Douglaston | RIR PS | Commercial | 1 | | | | | | | | | X | | | | | | |
| 54 | Drake | WL PS | One Grade | 1 | | | | | | | X | | X | | | | | | |
| 55 | Eby | WL SX | Grade #1 | 2 | | | | | | | X | | | | | | | X | |
| 57 | Edmond | INX | X Cross 103 | 1 | | | | | | X | | | | | | | | | |
| 58 | Eelman | WL PS | Eelman | 1 | | | | | | | | | X | | | | | | |
| 59 | Erath | WL SX | Erath Str. X | 1 | | | | | | | | | | | | | | X | |
| 60 | Fletcher | WL SX | FX 100 | 1 | | | | | | | | | | | X | X | X | | |
| 61 | Ford | WL SX | Ford V88 | 3 | | | | | | | | | | X | | | | | |
| 62 | Forsgate | WL SX | Forsgate | 1 | | | | | | | | | X | | | | | | |
| 63 | Fox-Den | BX | Black Diamond | 1 | | | | | | | | | | | | | X | | |
| 65 | Garber | CG x WL BX | Garber | 1 | | X | | | | | | | | | | | | | |
| 66 | Garber | WL SX | G 200 | 1 | | X | | | | | | | | | | | | | |
| 67 | Garber | WL SX | G 300C | 1 | | | | | | | | | | | | | X | | |
| 69 | Garrison | RIR x WR BX | Golden Sex-Link | 1 | | | | | | | X | | X | | | | X | | X |
| 70 | Gasson | WL SX | G 33 | 2 | | | | | | | X | | | | | X | | | X |
| 72 | Ghostley | WL SX | Pearl | 14 | | X | XX | X | X | X | X | X | X | X | X | X | X | X | |
| 74 | Graybill | WL PS | Graybill | 1 | | | | | | | | | | | | | | | |
| 75 | Great Plains | RIR PS | Egg Master | 1 | | | | X | X | | X | | | | | | | | |
| 76 | Great Plains | BX | Golden Cross | 1 | | | | | | | X | | | X | | | | | |
| 78 | Hall Bros. | WL SX | Commercial | 2 | | | | | | X | | | | | X | | X | | |
| 79 | Hall Bros. | BX | Silver Hallcross | 1 | | | | | | X | | | | | | | X | | |
| 80 | Hansen, (Wash.) | WL SX | Criss Cross H25 | 3 | | | | | | | X | | | | | X | | | |
| 82 | Hansen, (Wash.) | WL SX | Criss Cross 61 | 3 | | X | | | | | | | | X | | | | | X |
| 83 | Hansen, (Calif.) | AW BX | One Grade | 1 | | X | | | | | | | | | | | | | |
| 84 | Hanson | WL SX | Super Nick | 2 | | X | | | | | X | | | | | | | | |
| 85 | Harco | RIR PS | Flock Mating | 3 | | | | | | | | | X | | X | X | X | | |
| 225 | Harco | RIR x BPR BX | Sex Link | 1 | | | | | | | | X | | | | | | | |
| 86 | Hardy | BX | Sex Link | 1 | | | | | | | | X | | | | | | | |
| 87 | Harper | WL SX | Harper Huskie | 2 | | | | X | | | | | | X | | | | | |
| 88 | H & N | WL SX | Nick Chick | 18 | X | X | XX | X | X | X | X | X | X | X | X | X | X | XXX | X |
| 89 | H & N | CG x WL BX | H&N | 1 | | | | | | | | | | | | | | X | |

Stocks Entered in 1959-60 Random Sample Egg Production Tests (Cont'd.)

(Listed alphabetically and showing tests entered)

| Stock Code | Breeder | Breeding | Stock | No. Entries | Ariz. | Calif. | Fla. | Inter. Mt. | Iowa | Minn. | Mo. | N. H. | N. J. | N. Y. C. | N. Y. W. | N. C. | Penna. | Texas | Wisc. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 90 | Hobart | WL PS | Hobart | 1 | | | | | | | | | | | | | | | |
| 92 | Honegger | WL SX | Honegger Layer | 13 | | X | XX | X | X | | X | X | X | X | | X | X | X | X |
| 93 | Honegger | WL SX | Honegger Layer #62 | 1 | | | | | | | X | | | X | | | | | |
| 95 | Hubbard | RIR x NH  BX | H 496 | 5 | | X | X | | | | | X | | | X | X | X | | |
| 97 | Hy-Line | INX | 934A | 5 | | X | XX | X | X | X | X | X | X | X | X | X | X | XXX | X |
| 99 | Hy-Line | INX | 934C | 18 | X | X | X | X | | | X | | | | | | | XXX | X |
| 101 | Ideal | WL SX | H-3-W | 8 | | X | | X | | | X | | | X | | | | | |
| 102 | Indian Head | WL SX | Indian Head | 1 | | | | | | | | | X | | | | X | | |
| 103 | Indiana F. B. | WL SX | 10-33 | 2 | | | | | | | X | | | | X | | | | |
| 104 | Indiana F. B. | WL SX | 10-42 | 2 | | | | | | | X | | | | X | | | | |
| 106 | Jacobs | WL SX | Commercial | 2 | | | | | | | | | | X | | | | | |
| 107 | Kahn | WL SX | Commercial | 1 | | | | | | X | | | X | | | | | | |
| 108 | Kerr | WL IN | 409C | 1 | | | | | | | | | | | | | | | |
| 109 | Keystone | WL SX | Keystone Leghorn | 2 | | X | XX | | | | X | | | | | | X | | |
| 110 | Kimber | WL SX | K 137 | 15 | X | X | X | X | X | X | X | | X | X | X | X | X | XX | X |
| 112 | Kimber | WL SX | K 155 | 6 | X | X | | | | | | | | | | | | | |
| 113 | Kruger | WL SX | Commercial | 1 | | | | | | | | | | | | | | | |
| 114 | Lakewood | WL LX | Commercial | 1 | | | | | | | | | X | | | | | | |
| 115 | Lasher | WL PS | Commercial | 1 | | X | | | | | | | | | | | | | |
| 116 | Lawton | WPR PS | Certified Cand. | 1 | | | | | | | | | | | X | | | | |
| 117 | Lawton | RIR x WPR  BX | Buff Sex Link | 1 | | | | | | | | X | | | | | X | | |
| 118 | Leader | WL SX | 10X | 2 | | | | | | | | | | | X | | X | | |
| 248 | Lee | WPR PS | Lee | 1 | | | | | | | | | | | | | | | |
| 121 | Leonard | BX | Lanco 505 | 1 | | | | | | | X | | | | | | | | |
| 122 | Liechty | WL SX | L 240 | 1 | | | | | | | X | | | | | | | | |
| 124 | Lux | WL SX | H-D-6 | 4 | | | | | X | | X | | | X | | | | | X |
| 126 | Mathews | WL SX | M 138 | 1 | | | | | | | | | | | | | | | X |
| 127 | McDonald, Ray | WL SX | McDonald | 1 | | | | | | | | | | | | | | X | |
| 128 | McDonald, Roy | WL SX | McDonald | 1 | | | | | | | | | | | | | | X | |
| 132 | Meadow View | WL SX | 3 way | 1 | | | | | | | | | | | | | | | X |
| 133 | Merryknoll | BX | Merryknoll 400 | 1 | | | | | | | | X | | | | | | | |
| 134 | Midwest | WL PS | Best Egg Grade | 1 | | | | | | | X | | | | | | | | |
| 135 | Midwest | RIR PS | Prod. Red | 1 | | | | | | | X | | | | | | | | |
| 136 | Missouri Valley | WL PS | Best Egg Contest | 1 | | | | | | | X | | | | | | | | |
| 137 | Missouri Valley | BX | Ski Line Layers | 1 | | | | | | | X | | | | | | | | |
| 139 | Niles | WL SX | Niles | 2 | | X | | | | | | | | | | | | | |
| 140 | Niles | CG x WL  BX | Commercial | 1 | | X | | | | | | | | | | | | | |
| 141 | Nimton | WL SX | Nimton | 2 | | X | X | | | | | | X | | | | | | |

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Stocks Entered in 1959-60 Random Sample Egg Production Tests (Cont'd.)

(Listed alphabetically and showing tests entered)

| Stock Code | Breeder | Breeding | Stock | No. Entries | Ariz. | Calif. | Fla. | Inter. Mt. | Iowa | Minn. | Mo. | N. H. | N. J. | C. N. Y. | W. N. Y. | N. C. | Penna. | Texas | Wisc. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 142 | Norco | WL PS | Grade A | 1 | | X | | | | | | | | | | | | | |
| 143 | Norris | WL PS | Efficiency Leghorns | 1 | | | | | | | | | | | | | X | | |
| 144 | Oster | WL SX | Oster | 1 | | | | | | | | | | | | | | | |
| 145 | Ottawa | WL PS | Random Bred | 2 | | | | | | | | | X | | | | | | |
| 148 | Parmelee | BPR PS | Certified | 1 | | | | | | | | X | | | X | X | X | | |
| 149 | Parmenter | RIR PS | Certified | 5 | | X | | | X | | X | | | X | X | | | | |
| 151 | Peerless | WL SX | Peerless 262 | 2 | | X | | | | | X | | | | X | X | X | | |
| 152 | Penna. F. B. | WL SX | LSC 55 | 2 | | | | | | | | | | | | | X | | |
| 154 | Pillsbury | WL SX. | Maxi-Lay Queens | 1 | | | X | | | | | | | | | | | | |
| 157 | Purdue | RIR x WL BX | Random Bred | 1 | | X | | | | | | | | | | | | | |
| 158 | Randall | WL SX | Randall | 1 | | X | | | | | | | | | | | | | |
| 159 | Randall | CG x WL BX | Randall | 1 | | X | | | | | | | | | | | | | |
| 160 | Rapp | WL SX | Rapp Line Cross | 8 | | | | | X | | X | | X | X | X | X | X | | X |
| 161 | Reid | CG x WL BX | VH 354 | 1 | | | | | | | | | X | | | | | | X |
| 164 | Richardson | WA BX | Commercial | 1 | | X | | | | | X | | | | | | | | |
| 165 | Richardson | WA BX | Commercial MWA | 1 | | X | | | | | | | | | | | | | |
| 170 | Ruckers | INX | GW 389A | 2 | | | | | | | | | | X | | | | | |
| 171 | Ruckers | INX | GW 389C | 1 | | | | | | | X | | | | | | | | |
| 173 | Sand Hills | WL PS | Commercial | 2 | | | | | | | | | | | | | | | |
| 175 | Schaible | WL SX | Commercial | 3 | | | | | | | X | | | X | X | | X | | |
| 176 | Schaible | WL SX | Commercial 2 | 1 | | | | | | | X | | | X | | | | | |
| 177 | Schildmeyer | WL PS | Commercial | 1 | | X | | | | | | | | | | | | | |
| 178 | Schildmeyer | CG x WL BX | Commercial | 1 | | X | | | | | | | | | | | | | |
| 179 | Schubkegel | WL SX | M&S Cross | 1 | | | | | | | | | X | | | | | | |
| 180 | Schuyler | WL SX | Egg Champs | 2 | | | | X | | | | | | | X | | X | | |
| 181 | Shaver | WL SX | Starcross 288 | 6 | | X | | | | | X | X | | | X | X | X | | |
| 182 | Shenango | WL SX | Hamblin X | 1 | | | | X | | | | | | | | | X | X | |
| 183 | Sierra | CG x WL BX | Silver Gray | 1 | | X | | | | | | | | | | | | | |
| 184 | Spruce | WL SX | S-3 | 2 | | | | | | | | | X | X | | | X | | |
| 187 | Stever | WL SX | 300A | 2 | | X | | | | | | | X | | X | | X | | |
| 188 | Stever | WL SX | 300B | 1 | | X | | | | | | | | X | | | | | |
| 190 | Stone (Calif.) | WL SX | H-56 | 1 | | X | | | | X | | | | | | | | | |
| 192 | Stone (Minn.) | WL SX | 128 | 1 | | | | | | X | | | | | | | | | |
| 194 | Struthoff | WL SX | Commercial | 1 | | | | | | | | | X | | | | | | |
| 196 | Sunnyside | CG x WL BX | Wisco White | 1 | | | | | | | | | | | | | | | X |
| 197 | Swift | WL SX | Ski-Hi 316 | 3 | | | | | | X | | | | | | | | X | X |
| 199 | Townline | WL SX | SC 30 | 2 | | | | | | | X | | | | | | X | X | X |
| 200 | Truway | WL PS | Truway | 2 | | | | | | | | | | X | | | X | | |

Stocks Entered in 1959-60 Random Sample Egg Production Tests (Cont'd.)

(Listed alphabetically and showing tests entered)

| Stock Code | Breeder | Breeding | Stock | No. Entries | Ariz. | Calif. | Fla. | Inter. Mt. | Iowa | Minn. | Mo. | N. H. | N. J. | C. N. Y. | W. N. Y. | N. C. | Penna. | Texas | Wisc. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 201 | Univ. of Missouri | WL PS | Intra Flock | 1 | | | | | | | X | | | | | | | | |
| 202 | Vancrest | BX | All Red | 1 | | | | | | | | | | | | | | | |
| 203 | Vancrest | WL SX | Regular Mating | 1 | | | | | | | | | | X | | | | | |
| 208 | Warren | RIR x RIW BX | Sex-Sal-Link | 8 | | X | | | X | | X | X | | | X | X | X | | X |
| 209 | Weber | WL SX | Weber Cross | 1 | | | | | | | | X | | | | | X | | |
| 210 | Webster | RIR PS | Certified | 1 | | X | | | | | | | | | X | | | | |
| 211 | Welp | INX | 341 | 1 | | X | | | | | | | | | | | | | |
| 212 | Welp | WL SX | 901 | 1 | | | | | | | | | | X | | | | | |
| 214 | Wheelock | WL SX | Wheelock | 1 | | | | | X | | | | | | | | X | | |
| 216 | Willow Dale | WL PS | Commercial | 1 | | | | | | | | | | | X | | | | |
| 217 | Wirtz | WL LX | Line Cross | 2 | | | | | | | | | X | | | | | | |
| 218 | Wirtz | WL SX | Commercial | 1 | | | | | | | | | | X | | | | | |
| 219 | Wood | AW BX | Commercial | 1 | | X | | | | | | | | | | | X | | |

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Arizona Random Sample Test
        Ernest L. Parker, Arizona State University, Tempe

California Official Random Sample Egg Laying Test
        Emery A. Johnson, Route 3, Box 1145, Modesto

Florida Random Sample Test
        A. W. O'Steen, Chipley

Intermountain Random Sample Egg Laying Test
        J. David Carson, Utah State University, Logan, Utah

Iowa Multiple Unit Poultry Test
        LeRoy Kruskop, Iowa Poultry Association, National Plans Division Board,
            535 E. Lincolnway, Ames

Minnesota Random Sample Test
        Roy D. Carlson, Department of Agriculture, Dairy and Food,
            State Office Building, St. Paul 1

Missouri Official Random Sample Poultry Test
        Noel Hall, Mountain Grove

New Hampshire Multiple Unit Egg Production Test
        W. C. Skoglund, Department of Poultry Science,
            University of New Hampshire, Durham

New Jersey Random Sample Egg Laying Test
        R. L. Squibb, Rutgers University, New Brunswick

Central New York Official Random Sample Poultry Test, Horseheads
        Dean R. Marble, Cornell University, Ithaca

Western New York Official Random Sample Poultry Test, Stafford
        Dean R. Marble, Cornell University, Ithaca

North Carolina Random Sample Egg Laying Test
        G. A. Martin, School of Agriculture, North Carolina State College, Raleigh

Pennsylvania Random Sample Laying Test
        Paul J. Turek, Route 2, Harrisburg

*Tennessee Random Sample Laying Test
        O. E. Goff, University of Tennessee, Knoxville

Texas Random Sample Egg Production Test
        Bill H. Doran, Texas A & M College, College Station

Wisconsin Random Sample Egg Production Test, Oregon
        Arnold Guthrie, Department of Agriculture, State Capitol, Madison 2


* Data from the Third Tennessee Test were included in the 1958-59 Combined Summary.
   The Fourth Tennessee Test data will be included in the 1960-61 Combined Summary.

Growth Through Agricultural Progress